Generational succession in American giving:

Donors down, dollars per donor holding steady but signs that it's starting to slip

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Abstract

Comparing two generations at the same point in their life-cycles, four decades apart, indicates that average giving to charitable organizations (not including congregations) by Baby Boom families has remained roughly in line with the level of giving done by the Greatest and Silent generations, but that average giving by GenX and Millennial families is lower. All three generations exhibit the confluence of two divergent trends: lower percentages who give large amounts, but among families who do give large amounts, levels of giving compared to donors in previous generations are similar if not higher. The two divergent trends also characterize giving to religious congregations. Although "dollars per donor holding steady or up" describes Millennial, GenX and Baby Boom families compared to the Greatest and Silent generations, when the former three generations are compared to each other there are some indications that average giving among donors is starting to slip.

1. Introduction

Western democracies rely on charitable organizations to provide public goods to degrees that differ across countries (Anheier & Salamon, 2006). In countries placing more emphasis on government provision of public goods it is necessary to build majority political support to effect a change from the current provision level of public goods in either direction, up or down. Without political action the public good provision level does not automatically change. In contrast, in countries relying more heavily on charitable organizations, such as the United States (e.g. see Brown, Einolf, & Ottoni-Wilhelm, 2015), generational succession can automatically affect public good provision: if a previous generation is followed by a rising one whose voluntary giving is less, then all else equal the level of public goods provided by charitable organizations will be lower. In such countries it is important for charitable organizations to anticipate the direction of generational succession in giving so that they can respond. Accordingly, there is intense interest in the giving patterns of rising generations (e.g. Bhagat, Loeb, & Rovner, 2010; Center on Philanthropy, 2008; Charities Aid Foundation of America, 2015; Eisenberg, 2013).

Despite the importance of, and interest in, knowing how generational succession is affecting giving, there is little evidence about succession. This is because evidence about succession requires data measuring the giving of a previous generation at a point in time decades ago when they were at ages in their life-cycle that match the ages at which a rising generation is today. Although the Philanthropy Panel Study (Indiana University Lilly Family School of Philanthropy, 2015) has measured the giving of American families since 2001, data measuring the giving of previous generations are scarce. To our knowledge the only attempt to use such data from the U.S. was by Wilhelm, Rooney, & Tempel (2007) who found that giving to

charitable organizations by the Baby Boom generation in 2000 when they were ages 35-49 was in line with the level of giving done by previous generations in 1973 when they were 35-49, but that giving to religious congregations was lower. However, there is no corresponding evidence describing America's current rising generations, Generation X and the Millennials. Also, it is not known whether giving to charitable organizations by the Baby Boom since 2000 has remained in line with previous generations, or not.

There is reason to think that American Millennial and GenX families may be departing from the giving pattern seen in the Baby Boom and previous generations. In the United Kingdom, soon after policy-makers signaled a desire to shift away from government provision of public goods toward more reliance on charitable organizations (Brindle, 2010), Smith (2012) found that smaller percentages of people in rising generations were giving to charitable organizations than in the generations they were following (see Cowley, McKenzie, Pharoah, & Smith, 2011 for more details). For example, in 2010 the percentage among GenX people ages 30-44 who had given to a charitable organization in the past two weeks was 25 percent, compared to 34 percent among people from the Silent generation (and the first few years of the Baby Boom) in 1980 when they were 30-44.

This paper describes generational succession in American giving using the National Study of Philanthropy to measure the giving of American families from the Greatest and Silent generations in 1973 and seven waves of the Philanthropy Panel Study to measure the giving of families from the Baby Boom, GenX and Millennial generations over 2000-2012. The ages of the 1973 generation are aligned to the ages of the generation in the 2000s so that the giving of both generations is measured at comparable ages in their life-cycles. We analyze giving to charitable organizations whose primary purposes are helping people in need, health, education,

youth and family services, international aid, the environment, the arts, and community improvement. Giving to religious congregations is analyzed separately. There are four main results. First, giving to charitable organizations by Baby Boom families has remained roughly in line with the level of giving done by the Greatest and Silent generations four decades ago. Second, and in contrast, giving to charitable organizations by GenX and Millennial families appears to be lower. Third, these results emerge from the confluence of two divergent trends: the percentage of families who give large amounts (by which we mean over $600, roughly speaking) is much lower in the Baby Boom, GenX and Millennial generations compared to what it was in the Greatest and Silent generations, but among Baby Boom, GenX and Millennial families who do give large amounts, the level of giving is in line with donors from previous generations, if not higher. In other words, the description of generational succession in giving to charitable organizations appears to be "(the number of) donors down, dollars per donor holding steady or up."

Fourth, giving by all three rising generations to congregations is lower. Once again, however, this result emerges from the same confluence of two divergent trends: donors down, dollars per donor holding steady or up.

Relative to Wilhelm et al. (2007) our contribution is to present comparisons across five generations, instead of just two. For the U.S. these comparisons are the first generation succession results describing GenX and the Millennials. A second contribution relative to Wilhelm et al. (2007) is that we present results about percentages in each generation who donate and the average amounts given by donors. It is this contribution that leads to our "donors down, dollars per donors holding steady" conclusion. Relative to Smith (2012) our contribution, in addition to the American context of course, is to separately analyze giving to charitable

organizations and giving to congregations. The evidence from the U.K. also indicates "donors down, pounds per donor up," suggesting that this pattern of generational succession is broader than a single country context. We return to this in the Discussion.

The results are significant for practitioners. Of course, practitioners are well-aware that the giving patterns of GenX and Millennials are important, but our results suggest that practitioners can anticipate that giving levels from these rising generations may not be in line with what they have been expecting. More importantly, and we hope more helpfully, the results provide some indication about a successful practitioner response. The results suggest that a response based on encouraging current donors to give more may be unrealistic because current donors are already giving at the same or higher levels than donors from previous generations. A response based on the difficult work of engaging new donors may be the best path forward. Finally, the results also contribute to the larger literature describing generational succession in a range of attitudes and behaviors (e.g. Hout & Fischer, 2014; Taylor, 2014).

2. Theory and literature review

Numerous events combine to influence a generation's ethos, its attitudes and behavioral patterns. Wars, economic distress and political crises—shocks to the society—influence a generation's ethos long after the events themselves have passed. The response to shocks by society and its institutions, and whether that response is deemed successful or not, further influence generational ethos. Generational theory links these events, shocks and responses to attitudes and behaviors that are seen as emblematic of the generation's ethos. In this section we describe generational ethos as we see it, and discuss how it might connect to generational patterns in charitable giving.

The defining events of the Greatest generation (born 1927 and earlier) were the Great Depression and World War II. Both were cataclysms of such magnitude that it is hard to imagine how the generation could have come through without a socially unified response. Although the years of suffering were harsh and long, the federal government's responses were eventually deemed a success: the Depression was overcome; the War was won. And institutions were created, such as Social Security and a strong military, that realistically held out the promise that the country was better-prepared should the future bring cataclysms of similar magnitude. Unifying to achieve common purposes, and having confidence that institutions could achieve those purposes, understandably became part of the Greatest generation's ethos. Putnam (2000, pp. 268-276) relates a similar narrative.

The benefits of common purpose and institutions also became part of the Silent generation's (born 1928-1945) ethos. The Silent generation's childhood and adolescent formative years were the years just described, plus the subsequent prosperity years of the 1950s. By no means were the 1950s free of conflict or worry, but the Silent generation came of age having experienced directly, or been told stories about, how common purpose and institutions brought their parents through the Great Depression and World War II. The prosperity the Silent generation experienced for themselves backed that up. Evidence indicates that compared to the generations to follow, the Silent generation had, and has, high confidence (trust) in institutions, such as the federal government, organized religion, the military, education, and the scientific community (Twenge et al., 2014). Putnam (1995, p.675) referred to both generations, Greatest and Silent combined, as the "long civic" generation: "substantially more engaged in community affairs and substantially more trusting than those younger than they."

Events to follow worked against the formation of common purpose and confidence in institutions among the people born in the Baby Boom (1946-1964). The federal government led the country into war in Vietnam and was unable to overcome economic instability in the 1970s. Confidence in government and political institutions were further undermined by the Watergate scandal. During this time the percentage of people placing a high emphasis on autonomy of thought rose from 45% among people born in 1900 to 65% among people born 1945 and after (Hout & Fischer, 2014). Indeed, protest movements working against established institutions became central to ending the war and achieving progress in civil rights. The percentages participating in the institutions of civic life—such as writing a letter to a newspaper, attending a public meeting, serving as a committee member for a local organization, etc.—were much lower in the Baby Boom than was the case in earlier years among the Greatest and Silent generations (this claim is based on lining up the ages at which participation is being measured in Putnam, 2000, pp.251-252). Evidence indicates confidence in institutions to be at a low among the Baby Boom (Twenge et al., 2014). Increasing autonomy of thought (Hoge, Johnson, & Luidens, 1994), many churches' opposition to the anti-war and civil rights movements (Bogaski, 2014; Hadden, 1969; Marsh, 1997; Wald & Calhoun-Brown, 2014; cf. Hoge et al., 1994), and opposition to changing attitudes about abortion, extra-marital sex and recreational drug use among many, though not all, in the Baby Boom (Putnam, Campbell, & Garrett, 2010) weakened confidence in religious institutions.

This changing generational ethos, begun in the Baby Boom, continues to take hold among GenX (born 1965-1980) and the Millennials (born 1981 and after), two generations that are less distinct from each other, than are the distinctions between the Greatest, Silent and Baby Boom generations. The government response to the September 11 attack—wars in Afghanistan

and Iraq begun when the Millennials were adolescents and the oldest GenXers were only 36—has yet to produce a definitive resolution, and no end is in sight. The response to the 2007 Great Recession—which hit the Millennials when they were just entering the labor force and GenXers when they were still in the first half of their working years—was a success compared to the counterfactual depression that could have happened (Blinder & Zandi, 2015), but a failure in terms of communicating that success (Blinder, 2013). Not surprisingly, confidence in institutions remains low among GenX and Millennials relative to the Greatest and Silent generations (Twenge et al., 2014). In addition, there is weaker confidence in the specific institution that embodies the Greatest and Silent generations' confidence in government: Social Security (35% of GenX and 42% of Millennials think they will receive zero retirement dollars from the program; Taylor, 2014). The percentage of Millennials anticipating zero dollars from Social Security has recently risen to 51% (Pew Research Center, 2014).

Autonomy of thought remains highly valued among GenX and Millennials, and accompanying this are increases in self-centeredness (specifically, narcissism; Twenge et al., 2008) and decreases in empathic concern for others (Konrath, O'Brien, & Hsing, 2011). Participation in the institutions of civic life is even lower, at least among GenX (see 2000, pp.251-252; Millennials were too young to be included in this analysis). Confidence in religious institutions continues to weaken, as reflected in the rising percentage of Millennials who have no denominational preference—35 percent compared to the Baby Boom's 17 percent and the Greatest generation's eight (Taylor, 2014). This weakening confidence in religious institutions is in part a reaction to conservative religious institutions becoming politically more assertive in opposing changing attitudes about sex (Hout & Fischer, 2002, 2014; Putnam, Campbell & Garrett, 2010; Taylor, 2014, p. 166), and in part because Millennials were raised by the Baby

Boom, many of whom had already lost confidence in religious institutions (Hout & Fischer, 2014, p. 22). Putnam (2000, p. 283) again offers a similar narrative: although time and money pressure, suburbanization, commuting, television, and other electronic entertainment have contributed to declining civic engagement, the main explanation is generational succession.[1]

Previous evidence connecting generation-to-generation change in ethos—changing from common purpose toward increasing autonomy, lower confidence in government, organized religion and other institutions—to change in behavior has been based primarily on participation: declining number of group memberships (Putnam, 1995), voting (Putnam, 1995), religious preference (Hout & Fischer, 2014; Taylor, 2014), attendance at worship services (Wilhelm et al., 2007; Putnam, 2000, p. 252). In terms of giving behavior, this would seem to imply a decline in participation—the percentage who give to charitable organizations—though not necessarily a decline in the average amounts given by those who do choose to donate. It may be that participation in giving reflects underlying engagement, and among the engaged from one generation to the next, donations are little changed. This is in line with pattern described in the Introduction: "number of donors down, but dollars-per-donor holding steady".

3. Data and methods

Our method is to compare giving by people of the same age, but from different years (hence from different generations), adjusting for inflation and real income growth. In this section we provide a basic overview of the data and methods (full details are available in a web appendix).

3.1 Generations and life-cycle stages

The National Study of Philanthropy describes the giving of American families in 1973 (Survey Research Center, 1977). The seven biennial waves of the Panel Study of Income

Dynamics 2001-2013 describe the giving of American families every other year 2000-2012 (Survey Research Center, 2015). Both studies measure American giving to a comprehensive set of charitable organizations. Among recent studies, only the Panel Study measures giving at the top of the distribution well enough to permit comparison to the National Study (Wilhelm, 2007).

Our approach is to define generational cohorts based on working-age people (ages 25-60) in the 1973 National Study and compare them to same-aged people in the Panel Study during 2000-2012. Specifically, we compare National Study 36-60 year-olds—members of the Greatest and Silent generations (1928-37)—to Panel Study respondents aged 36-60—members of the Baby Boom. We refer to people aged 36-60 as being in middle and senior adulthood.

For our analysis of Millennials and GenX, we compare National Study 25-47 year-olds—members of the Silent generation plus the first three Baby Boom years (1946-48) and last two Greatest generation years (1926-27)—to Panel Study respondents aged 25-47—Millennials and GenX. We refer to people aged 25-47 as young and middle adults.

We selected these particular age ranges (25-47 and 36-60), and allowed them to overlap, in order to achieve two objectives subject to a constraint. Our first objective was to keep the age ranges wide (23 years for the young/middle adults and 25 years for the middle/senior adults). We want wide age ranges to maximize statistical power in light of the National Study's relatively small sample size (N = 1,649) which becomes yet smaller upon any splitting into sub-samples by age. Narrower age ranges would lead to loss in precision. Our second objective was to keep the age ranges fixed between 1973 and 2000-2012. This is obviously necessary for comparisons between generations that hold constant the position in the life-cycle. Pursuing these two objectives—fixed age ranges that are wide enough to deliver power—implies some mixing of generations within the fixed age ranges. Therefore, we constrained our pursuit of the two

objectives by requiring that the mixing of generations remain relatively in-line with the theory developed in Section 2. For example, the age range 36-60 during 2000-2012 yields only Baby Boomers (no mixing of generations at all) and in 1973 mixes members of the Greatest and Silent generations. This mixing is relatively in-line with the Section 2 theory in that the Greatest and Silent generations are much more similar to each other than either are to the Baby Boom. Readers interested in results with essentially no mixing of generations can find them in the web appendix; where such results suggest qualification or nuance to the results presented below for 25-47 and 36-60 year-olds, we will point that out.

3.2 Measuring giving

The Panel Study queries giving separately by nine purposes of charitable organizations: helping people with basic needs, youth and family services, health, education, combined appeals, community, cultural, environmental, and international, as well as a "mop-up"/"other" category. In Study 1 we aggregate all of this into one category called giving to "charitable organizations"; some may prefer the label "non-profit organizations", and we have no objection to that label. Study 2 is about giving for religious purposes/spiritual development. This is measured with a question that focuses the respondent's attention on giving primarily to congregations, but also to TV and radio ministries. We refer to these amounts as giving to "congregations".

In the National Study a skip pattern in the questionnaire has implications for how we can compare its data to those from the Panel Study. National Study respondents were first asked if they had given anything to a religious or other charitable organization. If "yes", then a second question asked if that was more than $100. If the answer to that second question was "no", then all subsequent questions about giving were skipped. Only if the answer to the $100 question was "yes" did subsequent questions determine whether the person (a) gave specifically to charitable

organizations, (b) gave specifically to religious congregations, and (c) the separate amounts given to each of (a) and (b). To maintain comparability across the National and Panel Studies, we follow Wilhelm et al. (2007) and artificially impose this same information restriction on the Panel Study respondents.

3.3 Methods

Continuing to follow Wilhelm et al. (2007), amounts given in 1973 dollars from the National Study are adjusted forward to 2012 to account for both inflation and real income growth. For example, the inflation/real growth adjustment for 36-60 year-olds from 1973 to 2012—a factor of 6.16—yields an amount that reflects expectations of what the giving of 36-60 year-olds in 2012 would look like if all that had changed were inflation and real growth. In short, those expectations, and our results, are about generational succession in giving as a percentage of income available to each generation, even though we present the results in dollar terms to ease discussion. We adjust the Panel Study data similarly, and express all results in 2012 terms.

We report estimates of giving averaged across all members of a generational cohort, including both donors and non-donors, just as in Wilhelm et al. (2007). In addition, we extend their work by presenting estimates of percentages in each generation who give and the average amount given by the donors. Here again, the National Study's skip pattern has implications for the comparisons we can carry out. For a donor in the National Study who gave less than $100, we do not know for sure whether the person gave to charitable organizations because he/she could have donated only to religious congregations. However, if the donor gave more than $100, then we do know the amounts they gave separately to charitable organizations and congregations. Hence, in the National Study we can estimate the fraction of people who both (a) gave to charitable organizations and (b) who gave large amounts (more than $100) to charitable

organizations and religious congregations combined. Again, we impose this same information restriction on the Panel Study respondents: continuing with the comparison to 36-60 year-olds from 1973, we estimate the fraction of Panel Study 36-60 year olds who both (a) gave to charitable organizations and (b) who gave more than \$616 ($\$100_{1973\ dollars}$ times the 6.16 adjustment factor) to charitable organizations and religious congregations combined.

A second extension is that we examine two "near-term" generation-to generation comparisons: Millennials compared to GenX in young adulthood and GenX compared to the Baby Boom in middle adulthood. Because these comparisons do not require the National Study we can compare the percentages who give any amount, not just large amounts, to charitable organizations (or to congregations), and the average amounts given by them. To distinguish these near-term comparisons from those involving the 1973 National Study, we will refer to the latter as "long-term" comparisons.

We present weighted averages, just as in Wilhelm et al. (2007). The National Study weights adjust for the high-income oversample. The Panel Study weights adjust for attrition and mortality over time. A third extension relative to Wilhelm et al. (2007) is the greater precision in the Panel Study estimates due to our use of seven waves from the Panel Study of Income Dynamics. We pool the seven waves, and calculate clustered standard errors.

4. Results

Study 1: Charitable organizations

In Table 1 we begin with the long-term generation-to-generation comparison in Panel 1. Row 1 column 1 indicates that 25-47 year-olds in 1973 on average gave \$624 (in 2012 terms) to charitable organizations. The estimate in column 2 indicates that average giving among people ages 25-47 in the 2000s (Millennial young adults and GenX young/middle adults) is \$443. The

difference in column 3 indicates that the Millennial/GenX–young/middle adults are giving $180 less than would have been expected based on the $624 estimated average giving of those in 1973 at the same point in their life-cycle, mostly members of the Silent generation (to ease discussion, we will refer to this group simply as the "Silent generation"). The $180 difference is precisely estimated (two-sided $p = .005$).[2]

Row 2 presents percentages who give to charitable organizations (and who give large amounts to charitable organizations and religious congregations combined): this percentage is down 18 points among Millennial/GenX–young/middle adults (column 3), and is precisely estimated ($p < .001$). Hence, donors down. In contrast, row 3 suggests Millennial/GenX–young/middle adults who do give large amounts and who give to charitable organizations are, if anything, giving higher amounts (+$222, $p = .138$) than expected compared to the Silent generation in 1973. Although the +$222 is notable in magnitude, it is not precisely enough estimated to claim two-sided statistical significance; accordingly we make the weaker claim that dollars per donor are holding steady, if not up.[3]

Results for Baby Boom–middle/senior adults (columns 4-6) begin with a difference: average giving is essentially in line with expectations (−$52, $p = .585$) based on the Greatest/Silent generation middle/senior adults in 1973. However, seven percentage points fewer are giving to charitable organizations (and giving large amounts, $p < .001$). And again, among those donors, average amounts given are, if anything, higher (+$174, $p = .319$). Donors down. Dollars per donor holding steady if not up.

Panel 2 presents "near-term" generation-to generation comparisons of giving to charitable organizations. Row 1, columns 1-3 indicate that Millennial young adults are giving less on average (−$92, $p = .001$) than did GenX young adults. Row 2 indicates that the percentage of

Millennial young adults who give to charitable organizations (who give large amounts) is four points lower than the percentage of GenX doing the same as young adults ($p = .005$). Such Millennial donors are giving $262 lower amounts, on average, than did the comparison GenX young adults ($p = .035$); this is in contrast to the +$222 "dollars per donor holding steady" result seen in Panel 1 row 3. Hence, while the Millennial–GenX young adulthood comparison still indicates "donors down", there is evidence that dollars per donor are starting to slip.

Rows 4 and 5 step back from conditioning on donors who give large amounts, a condition required in Panel 1 by the National Study skip pattern, to consider donors of any amounts (over $25). Despite removing the "large amount" condition, the results parallel those from rows 2 and 3 results: the percentage of Millennial young adults who give to charitable organizations is 12 points lower than the percentage of GenX young adults who did so ($p < .001$), and among Millennials who give the average amount given is $83 less. Although a two-sided test of the −$83 cannot be rejected, a one-sided test of "holding steady or up" can ($p = .089$).

In Panel 2, row 1, columns 4-6 indicate that GenX middle adults are giving $113 less on average than did the Baby Boom in middle adulthood ($p = .139$). The GenX percentage who give to charitable organizations (and who give large amounts) is seven points lower than was the case among Baby Boom middle adults ($p < .001$), but the amounts per donor are essentially the same (row 3). Row 4 removes the "large amount" condition to show that the GenX percentage giving to charitable organizations is five points lower than in the Baby Boom ($p = .008$). The average amount given per donor is $94 less among GenX donors (row 5; $p = .460$).

Study 2: Congregations

Table 2 presents results about giving to congregations. In Panel 1, row 1 column 3 indicates that, on average, Millennial/GenX–young/middle adults are giving $412 less than

would have been expected based on the giving to congregations by the Silent generation in young and middle adulthood back in 1973 ($p < .001$). A qualifying nuance to this result is that while it certainly applies to GenX middle adults, it applies with less force to young adults, both Millennial and GenX.[4] Despite this qualification, reading down column 3 the pattern is again donors down (by 18 percentage points, $p < .001$) and dollars per donor up ($170) or in line with expectations (because the +$170 is not statistically significant, $p = .368$). Column 6 indicates qualitatively similar results among the Baby Boom in middle and senior adulthood: on average $284 less giving to congregations than expected compared to Greatest/Silent adults at the same point in their life-cycle in 1973 ($p = .018$). The percentage who donate to congregations (and who give large amounts to charitable organizations and congregations combined) is lower by nine percentage points ($p < .001$), but the average giving of those donors is in line with expectations (the +$33 is small in magnitude; $p = .886$). Donors down. Dollars per donor holding steady if not up.[5]

Panel 2 presents the "near-term" generation-to generation comparisons. Row 1 column 3 indicates that Millennial young adults are giving to congregations $78 ($p = .219$) less than expected compared to GenX young adults, three percentage points less likely to give to congregations (and give large amounts), and among those donors $49 less ($p$s = .063, .881). Rows 4 and 5 step back from conditioning on the donors who give large amounts and indicate eight percentage points fewer giving to congregations ($p < .001$) but among donors $175 more on average ($p = .436$). Overall, we see this as evidence of donors down, but dollars per donor holding steady (the −$49) or perhaps up (the +$175).

Continuing in Panel 2 and reading down column 6 indicates qualitatively similar results for the GenX–Baby Boom middle adulthood comparison, for the most part, although the

magnitudes of the differences are much larger than in column 3. In row 1 GenX middle adults are on average giving to congregations $359 less than did Baby Boom middle adults, nine percentage points fewer give to congregations (and give large amounts) ($p < .001$), and among those donors giving is $378 less ($p = .112$). Rows 4 and 5 indicate that eight percentage points fewer GenX middle adults give to congregations ($p < .001$), and among these donors average giving is $457 less than Baby Boom donors to congregations ($p = .018$): "donors down" and evidence that dollars per donor are also down.

5. Discussion

The results indicate that Millennial and GenX young and middle adults, as a group, are giving to charitable organizations less than expected compared to (mostly) Silent generation young and middle adults from 1973. In contrast, Baby Boom adults, both middle and senior, are giving to charitable organizations in line with expectations based on their Silent/Greatest generation counterparts in 1973. Both of these results, despite their difference with respect to each other, arise from two unambiguous trends: the percentage of donors is down, while the dollars per donor are, at a minimum, in line with expectations, if not higher. Turning to the near-term generation-to-generation comparisons, the evidence indicates that the first of these trends—donors down—is continuing. However the second trend—dollars per donor holding steady or up—is starting to slip among Millennial young adults: this is clearly the case among large donors and among all donors recall that a one-sided test of "holding steady or up" can be rejected.

Giving to congregations is down among both Millennial/GenX–young/middle adults (however, recall the possible qualifications to this result mentioned for young adults) and Baby Boom middle and senior adults, compared to their 1973 Silent generation counterparts. Again, the confluence of two divergent trends produces these results: the percentage of donors is down,

while the dollars per donor are in line with expectations if not higher. Turning to the near-term generation-to-generation comparisons, once again the evidence indicates that the first of these trends—donors down—is continuing, but the second—dollars per donor holding steady—is starting to slip among GenX middle adults.

The Baby Boom results indicate that the main result from Wilhelm et al. (2007)—that on average giving to charitable organizations was in line with the giving done by previous generations, but that giving to congregations was lower—continues to hold as the Baby Boom cohort has aged. The "donors down" result across all generational groups is similar to Smith's (2012) finding from the U.K. This suggests that generational succession in terms of lower percentages who give appears to be a wider phenomenon than in just the U.K. or the U.S. alone. And it indicates that generational succession is largely about how a gap within each generation between families that donate and families that do not is changing. Hence, a central question for future research is to understand the characteristics describing the missing donors within each generation.

There are two limitations to these results that are important to keep in mind. First, the Millennials in this study are in their very first years of young adulthood, just establishing their own households apart from their families of origin, and doing so in the midst and aftermath of the Great Recession. Therefore, what we have reported here about Millennial giving may not be an indication of their future giving behavior as they move into middle adulthood years, years that also will be further removed from the Great Recession.[6] Second, our results about "typical" American families do not necessarily pertain to the top two percent (Wilhelm et al., 2007). Although we do not know one way or the other, it is possible that giving by the top two percent

is counterbalancing some of the patterns we have described. Future work is needed to address these limitations.

The pattern of results is in line with Section 2's description of generational ethos changing from common purpose toward increasing autonomy and toward lower confidence in institutions. Of course, other explanations are possible, such as rising inequality or demographic change, and these suggest areas for future research. For instance, women are playing a more prominent role in terms of earning income and making financial decisions within couples: Do the patterns reported here play out differently for single women and men, and within couples using different decision-making approaches to charitable giving?

The results have two implications. First, conceptually the results remind us that, while stability in overall averages often is implicitly taken as absence of change underneath, it is not necessarily so. There are many counter-examples in the present results. Even the direction of change in the average does not imply the same directions of change for the percentage who donate and the dollars per donating family—counter-example: Millennial/GenX–young/middle adult giving to charitable organizations (Table 1, Panel 1). Even a "no change" in a simple average does not indicate the absence of change when income and wealth are controlled for—counter-example: most of our results about average giving being in line with (or lower than) expectations would have been lower than (or more dramatically lower than) expectations had it not been for rising incomes and wealth in the Baby Boom and GenX generations (Blinder-Oaxaca decompositions are available in the web appendix).

Second, the results alert practitioners in charitable organizations that the average giving of GenX and Millennial families is lower relative to expectations based on previous generations. Our results that dollars per donor are in line with expectations, if not higher, suggests that a

response based on trying to persuade already donating families to donate more will not be successful. A successful response needs to be based on understanding the reasons why the percentages of GenX and Millennial families who donate are down. Because the percentage of Baby Boom families who donate also is down, the question may not be "why are percentages of donors among the Baby Boom, GenX and Millennial families down?" but rather might be "why were percentages of donors among the Greatest and Silent generations up?"

Finally, we close with a caution. All too often results along the lines that we have presented here are used explicitly, or implicitly, to criticize the giving behavior of the group found to be giving lower amounts. Such use is not helpful, because it gets in the way of understanding the reasons why the results are occurring. It should be kept in mind that young and middle-aged adults in the 2000s are facing different circumstances than faced by previous generations. For instance, a GenX middle adult in our study (born 1970) has a 61 percent chance of earning more income than his/her parents, dramatically lower than the 92 percent chance a Silent generation middle adult (born 1940) had of doing the same (Chetty et al., 2016). It may be that lower income expectations (relative to one's parents) and lower confidence in Social Security has made young and middle-aged adults more hesitant in their present day giving behavior. Work to understand the reasons why can help practitioners take those realities into consideration as they build relationships with GenX and Millennial families. Criticizing their giving behavior instead of working to understand it is an obstacle to building those relationships.

6. Conclusion

Using two data sources collected four decades apart this paper has provided evidence about generation-to-generation change in giving. Among Baby Boom families average giving to charitable organizations is in line with expectations based on previous generations four decades

ago. Among Millennial and GenX families average giving is lower. Although these patterns of generation-to-generation change are different among the Baby Boom and Millennial/GenX, they share in common two underlying trends: the percentage who donate are down, while the dollars given by families who do donate are in line with expectations if not higher. Donors down, dollars per donor holding steady or up. Donors down/dollars per donor holding steady or up also describes giving to congregations.

When we turn to "near-term" generation-to-generation change, a difference relative to the results just described begins to emerge: while there is still strong evidence of "donors down", there are signs that "dollars per donor steady or up" is starting to slip. In other words, there is evidence that dollars per donor are starting to fall among Millennial young adults giving to charitable organizations and GenX middle adults giving to congregations.

These results suggest that maintaining levels of charitable giving, and in turn the public goods charitable organizations provide with those funds, will require the difficult work of understanding why the percentages of donors are down, and using that understanding to expand the number of new donors. Because dollars per donor are holding steady or up, we think there is little room to maintain levels of charitable giving in the face of declining percentages who give, by encouraging current donors to give even higher amounts. That said, a careful eye should be kept on dollars per donor, because the "near-term" results suggest that may be starting to slip.

Finally, the results suggest that underneath the seemingly unchanging level of American generosity—giving to charitable organizations plus congregations as a percentage of disposable personal income has remained approximately at two percent year in and year out over the four decades of the present study (Indiana University Lilly Family School of Philanthropy, 2016, p. 327)—important dynamic changes are underway.

Notes

[1] Not all agree that the overall decline in confidence in institutions and civic engagement implies a decline in confidence specifically in charitable organizations. Reports of low confidence in charitable organizations (Light, 2008) are not supported by careful analysis of the data (O'Neill, 2008). Moreover, data on confidence in charitable organizations go back only to the late 1980s (see O'Neill, Table 1), making it impossible to say anything about generation-to-generation change in confidence in charitable organizations stretching back to the 1970s and earlier.

[2] The $180 appears to be one dollar off from the $624 − $443 difference because of round-off error. This happens several times throughout the paper.

[3] The +$222 is notable/important in practical terms because it is a very large difference relative to the baseline $1,369 (Table 1, Panel 1, row 3, column 1). Although with the +$222 a one-sided null hypothesis that dollars per donor have fallen (or have not changed) can be rejected (one-sided $p = .069$), our view is that that is less important than both the large magnitude of the +$222 difference and how that magnitude fits in with the overall pattern to be presented. See McCloskey and Ziliak (1996) and Ziliak and McCloskey (2004) for a compelling argument that in non-experimental research a narrow focus on precision (statistical significance) can cause one to overlook important magnitudes and overall patterns of evidence.

[4] The result does not apply to GenX young adults, and does not apply as strongly to Millennial young adults, if one influential observation is excluded when estimating the 1973 average (results available in the web appendix).

[5] The $284 average less than expected is consistent with the result from Wilhelm et al. (2007) that Baby Boom adults aged 35-49 in 2000 were giving $202 less than expected to congregations, compared to 35-49 year olds in 1973 (members of the Silent generation 1928-1938 and the Greatest generation 1924-1927). The $202 was in 2000 terms, and expressing it in 2012 terms using our adjustments = $272.

[66] For GenX middle adults and Baby Boom senior adults the data allow us to confirm that the results are not being driven by lower average giving in the Great Recession/recovery years, but we cannot perform this sensitivity check for Millennial young adults (results available in the web appendix). Also available in the web appendix are sensitivity checks we carried out regarding influential observations and an alternative measure of giving to congregations, neither of which affected the results.

Table 1. Giving to charitable organizations.

Panel 1. Long-term generation comparison.

		Silent[a]	*Millennial / GenX*	*Difference*	*Greatest / Silent*	*Baby Boom*	*Difference*
		(1)	*(2)*	*(3) =(2) – (1)*	*(4)*	*(5)*	*(6) =(5) – (4)*
	Giving	*Young and middle Adulthood (ages 25-47)*			*Middle and senior Adulthood (ages 36-60)*		
(1)	Average by all households	624	443	–180***[d]	932	880	–52
		(516, 731)	(380, 507)	(–305, –55)	(773, 1091)	(778, 981)	(–136, 241)
(2)	Fraction who give large amounts[b]	0.45	0.28	–.18***	0.51	0.44	–.07***
		(.42, .48)	(.26, .29)	(–.21, –.14)	(.48, .54)	(.42, .46)	(–.10, –.03)
(3)	Average among those in row (2)	1369	1591	222	1828	2002	174
		(1163, 1576)	(1383, 1799)	(–71, 515)	(1562, 2094)	(1787, 2217)	(–168, 516)

Panel 2. Near-term generation comparison.

		GenX	*Millennial*	*Difference*	*Baby Boom*	*GenX*	*Difference*
		(1)	*(2)*	*(3) =(2) – (1)*	*(4)*	*(5)*	*(6) =(5) – (4)*
	Giving	*Young adulthood (ages 25-31)*			*Middle Adulthood (ages 36-47)*		
(1)	Average by all households	250	159	–92***	736	623	–113
		(204, 297)	(127, 190)	(–148, –36)	(634, 838)	(512, 733)	(–264, 37)
(2)		0.21	0.17	–.04***	0.42	0.35	–.07***

	Fraction who give large amounts[c]	(.19, .23)	(.14, .19)	(–.07, –.01)	(.39, .44)	(.32, .37)	(–.11, –.03)
(3)	Average among those in row (2)	1179 (985, 1373)	917 (769, 1065)	–262** (–506, –19)	1770 (1550, 1991)	1802 (1505, 2098)	31 (–338, 400)
(4)	Fraction who give any amounts.	0.49 (.47, .51)	0.37 (.34, .40)	–.12*** (–.16, –.08)	0.61 (.59, .64)	0.56 (.53, .59)	–.05*** (–.09, –.01)
(5)	Average among those in row (4)	510 (418, 603)	427 (350, 504)	–83 (–203, 37)	1202 (1043, 1362)	1109 (917, 1300)	–94 (–343, 155)

Notes: Ninety-five percent confidence intervals are in parentheses. *** p < .01, ** p < .05, * p < .10.
Influential observations are not included in the estimates of average giving by the Silent and Greatest/Silent generations. Influential observations are included in the estimates of average giving by the Millennial, GenX and Baby Boom generations. Influential observations are defined to be giving amounts above $50,000 in 2012 terms. The number of influential observations for giving to charitable organizations that are not included: Greatest/Silent middle and senior adults—two.

[a] Also includes 1926-27 of the Greatest generation and 1946-48 of the Baby Boom.

[b] "Who give large amounts" means those who give $100 or more in 1973 terms to charitable organizations and religious congregations combined. In 2012 terms, that is $589 for young and middle adulthood (columns 1 and 2) and $616 for middle and senior adulthood (columns 4 and 5).

[c] "Who give large amounts" means those who give $100 or more in 1973 terms to charitable organizations and religious congregations combined. In 2012 terms, that is $513 for young Millennial adults (column 1), $566 for young GenX adults (column 2), and $589 for GenX and Boomer middle adults (column 4 and 5).

[d] The $180 appears to be one dollar off from the difference $624 − $443 because of round-off error. This happens several times throughout the paper.

Table 2. Giving to congregations.

Panel 1. Long-term generation comparison.

		Silent[a] *(1)*	*Millennial / GenX (2)*	*Difference (3) =(2) – (1)*	*Greatest / Silent (4)*	*Baby Boom (5)*	*Difference (6) =(5) – (4)*
	Giving	*Young and middle Adulthood (ages 25-47)*			*Middle and senior Adulthood (ages 36-60)*		
(1)	Average by all households	1013	601	–412***	1552	1268	–284**
		(883, 1143)	(526, 676)	(–562, –262)	(1364, 1740)	(1127, 1408)	(–519, –49)
(2)	Fraction who give large amounts[b]	0.41	0.23	–.18***	0.47	0.38	–.09***
		(.38, .44)	(.21, .24)	(–.22, –.15)	(.43, .50)	(.36, .40)	(–.12, –.05)
(3)	Average among those in row (2)	2464	2633	170	3339	3373	33
		(2213, 2715)	(2361, 2905)	(–200, 539)	(3023, 3656)	(3043, 3703)	(–491, 424)

Panel 2. Near-term generation comparison.

		GenX (1)	*Millennial (2)*	*Difference (3) =(2) – (1)*	*Baby Boom (4)*	*GenX (5)*	*Difference (6) =(5) – (4)*
	Giving	*Young adulthood (ages 25-31)*			*Middle Adulthood (ages 36-47)*		
(1)	Average by all households	461	383	–78	1073	715	–359***
		(379, 542)	(290, 476)	(–201, 46)	(935, 1212)	(603, 826)	(–537, –181)
(2)	Fraction who give large amounts[c]	0.18	0.15	–.03*	0.36	0.28	–.09***
		(.15, .20)	(.13, .18)	(–.06, –.002)	(.34, .39)	(.25, .30)	(–.12, –.05)

(3)	Average among those in row (2)	2523 (2166, 2880)	2474 (1943, 3004)	–49 (–687, 590)	2968 (2640, 3295)	2590 (2258, 2921)	–378 (–844, 88)
(4)	Fraction who give any amounts	0.31 (.28, .33)	0.23 (.20, .26)	–.08*** (–.11, –.04)	0.46 (.43, .49)	0.38 (.35, .41)	–.08*** (–.12, –.04)
(5)	Average among those in row (4)	1498 (1258, 1737)	1673 (1303, 2043)	175 (–266, 615)	2324 (2052, 2596)	1867 (1604, 2130)	–457** (–835, –78)

Notes: Ninety-five percent confidence intervals are in parentheses. *** p < .01, ** p < .05, * p < .10.

The number of influential observations for giving to congregations that are not included: (a) Silent young and middle adults—one; (b) Greatest/Silent middle and senior adults—three. See Table 1 for additional notes about influential observations.

[a,b,c] See the notes in Table 1.

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A**ppendices for "Generational succession in American giving"**

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This document contains supplemental material for "Generational succession in American giving". Appendix A presents the generation–life-cycle stage–calendar year–age range relationships we can investigate with the National and Panel Studies.

Appendix B contains the full methodological detail necessary for replication. This includes the factors used to adjust the data to 2012 terms, the definition of potentially influential observations, and how we clustered the standard errors.

Appendix C examines the sensitivity of the main text's results in Panel 1 (from both Tables 1 and 2) to separating the generations into five separate generation–life-cycle groups: Millennial young adults, GenX young adults, GenX middle adults, Baby Boom middle adults and Baby Boom senior adults. These sensitivity results are presented in Appendix B's Figures 1-6. The figures, and the accompanying discussion, describe the effects of including/excluding the National Study's influential observations.

Appendix C also examines the sensitivity of the results to dropping the Great Recession years and to an alternative measurement of giving to congregations.

Finally, Appendix C contains the Blinder-Oaxaca decomposition: a decomposition of the generation-to-generation change in average giving into a part due to generation-to-generation change in income and wealth and a part due to generation-to-generation change in how much is given at each level of income and wealth.

Appendix A. Generations and life-cycle stages.

Table A1 presents the generation–life-cycle stage–calendar year–age range relationships we can study. Millennials in young adulthood first appear in the Panel Study in 2006, when people born in 1981 reached age 25. In subsequent years the age range of Millennial young adults included in the analysis expands, so that by 2012 ages 25-31 are included. GenX young adults appear in the Panel Study in 2000 when people born in 1969-1975 were ages 25-31. In subsequent years as those people age, the number of GenX young adults in the study declines; by 2012 there are none remaining. GenX middle adults are ages 32-35 in 2000, expanding to ages 32-47 by 2012 (the entire GenX 1965-1980 cohort). Baby Boom middle adults are 36-47 in 2000. As these people age, the number of Baby Boom middle adults declines. Baby Boom senior adults are ages 48-54 in 2000, expanding to ages 48-60 by 2006.

The bottom of Table A1 presents the Silent (1928-1945) and Greatest (1927 and before) generations, whose 1973 giving was measured in the National Study. Young adults aged 25-31 in 1973 were a combination of people born in the last four years of the Silent generation (1942-1945) and the first three years of the Baby Boom (1946-1948). Middle adults aged 32-47 in 1973 were predominantly from the Silent generation, but also included the last two years of the Greatest generation. Finally, senior adults in 1973 were born 1913-1925, all members of the Greatest generation.

Table A1. Generations, their life-cycle stages, and their ages in the calendar years in which giving is measured.

		Age in							
Generation	*Birth year*	***1973***	***2000***	***2002***	***2004***	***2006***	***2008***	***2010***	***2012***
Millennial	1987	—	13	15	17	19	21	23	25
	1986	—	14	16	18	20	22	24	26
	1985	—	15	17	19	21	23	25	27
	1984	—	16	18	20	22	24	26	28
	1983	—	17	19	21	23	25	27	29
	1982	—	18	20	22	24	26	28	30
	1981	—	19	21	23	25	27	29	31
		—							
GenX	1980	—	20	22	24	26	28	30	32
	1979	—	21	23	25	27	29	31	33
	1978	—	22	24	26	28	30	32	34
	1977	—	23	25	27	29	31	33	35
	1976	—	24	26	28	30	32	34	36
	1975	—	25	27	29	31	33	35	37
	1974	—	26	28	30	32	34	36	38
	1973	0	27	29	31	33	35	37	39
	1972	1	28	30	32	34	36	38	40
	1971	2	29	31	33	35	37	39	41
	1970	3	30	32	34	36	38	40	42
	1969	4	31	33	35	37	39	41	43
	1968	5	32	34	36	38	40	42	44
	1967	6	33	35	37	39	41	43	45
	1966	7	34	36	38	40	42	44	46
	1965	8	35	37	39	41	43	45	47
Baby Boom	1964	9	36	38	40	42	44	46	48
	1963	10	37	39	41	43	45	47	49
	1962	11	38	40	42	44	46	48	50
	1961	12	39	41	43	45	47	49	51
	1960	13	40	42	44	46	48	50	52
	1959	14	41	43	45	47	49	51	53
	1958	15	42	44	46	48	50	52	54
	1957	16	43	45	47	49	51	53	55
	1956	17	44	46	48	50	52	54	56
	1955	18	45	47	49	51	53	55	57
	1954	19	46	48	50	52	54	56	58
	1953	20	47	49	51	53	55	57	59
	1952	21	48	50	52	54	56	58	60
	1951	22	49	51	53	55	57	59	61
	1950	23	50	52	54	56	58	60	62
	1949	24	51	53	55	57	59	61	63
	1948	25	52	54	56	58	60	62	64

	1947	26	53	55	57	59	61	63	65
	1946	27	54	56	58	60	62	64	66
Silent generation	1945	28	55	57	59	61	63	65	67
	1944	29	56	58	60	62	64	66	68
	1943	30	57	59	61	63	65	67	69
	1942	31	58	60	62	64	66	68	70
	1941	32	59	61	63	65	67	69	71
	1940	33	60	62	64	66	68	70	72
	1939	34	61	63	65	67	69	71	73
	1938	35	62	64	66	68	70	72	74
	1937	36	63	65	67	69	71	73	75
	1936	37	64	66	68	70	72	74	76
	1935	38	65	67	69	71	73	75	77
	1934	39	66	68	70	72	74	76	78
	1933	40	67	69	71	73	75	77	79
	1932	41	68	70	72	74	76	78	80
	1931	42	69	71	73	75	77	79	81
	1930	43	70	72	74	76	78	80	82
	1929	44	71	73	75	77	79	81	83
	1928	45	72	74	76	78	80	82	84
Greatest generation	1927	46	73	75	77	79	81	83	85
	1926	47	74	76	78	80	82	84	86
	1925	48	75	77	79	81	83	85	87
	1924	49	76	78	80	82	84	86	88
	1923	50	77	79	81	83	85	87	89
	1922	51	78	80	82	84	86	88	90
	1921	52	79	81	83	85	87	89	91
	1920	53	80	82	84	86	88	90	92
	1919	54	81	83	85	87	89	91	93
	1918	55	82	84	86	88	90	92	94
	1917	56	83	85	87	89	91	93	95
	1916	57	84	86	88	90	92	94	96
	1915	58	85	87	89	91	93	95	97
	1914	59	86	88	90	92	94	96	98
	1913	60	87	89	91	93	95	97	99

Notes: Generations are color-coded: Millennial (dark green), GenX (red), Baby Boom (blue), Silent (lighter green), Greatest (purple). Life-cycle stages are shaded: young adulthood ages 25-31 (light grey), middle adulthood ages 32-47 (blue), senior adulthood ages 48-60 (dark grey). The sample sizes (unweighted) in each generation–life-cycle group are: Millennials young adults (N = 3,371), GenX young adults (N = 6,399), GenX middle adults (N=12,152; N = 6,781 36-47 year-olds, used in Table 3), Baby Boom middle adults (N = 7,593), Baby Boom senior adults (N = 13,040), Silent/Boom young adults (N = 388), Silent middle adults (N = 618), Greatest senior adults (N = 463).

Appendix B. Detailed description of data and methods.

B.1 Generations and life-cycle stages

Three considerations led us to the definition of five generation–life-cycle stage groups. The first two are (1) standard generational definitions (Taylor, 2014). These are: Millennial–born 1981 and after; GenX: 1965-1980; the Baby Boom: 1946-1964; Silent: 1928-1945; Greatest: 1913-1927. The second consideration is data availability: 2000-2012. The third consideration was requiring people to be 25 and older to avoid complications involving the transition from school and families of origin, into work and setting up one's own household. Likewise, we require people to be 60 and younger to avoid complications involving the transition from work to retirement. These three considerations—specifying a generation (e.g., Millennial), looking at a specific calendar year of the Panel Study (e.g., 2006), and the 25-60 year-old age range, imply the specific boundaries of the life-cycle stages, which are young adulthood: 25-31; middle adulthood: 32-47; senior adulthood: 48-60. These were displayed in Table A1.

Recall that for the text's Table 1 we combined the Millennial young adults, the GenX young adults and the GenX middle adults into one group. We also combined the Baby Boom middle and senior adults into one group. Appendix C below presents results for the five separate generation–life-cycle stage groups. Therefore in Appendix C, 1973 young adults are discussed separately from 1973 middle adults. Because the young adult 25-31 year-olds in 1973 were a combination of people born in the first three years of the Baby Boom (1946-1948) and the last four years of the Silent generation (1942-1945), we will refer to this generational mix as "Silent/Boom".

B.2 The analysis samples

The analysis samples from the National Study and the Panel Study follow Wilhelm et al. (2007). Within each of the National Study and the Panel Study there are separate subsamples. In the National Study there are two subsamples: one collected by the University of Michigan's Survey Research Center (SRC) and the other collected by the Census Bureau. The SRC used an area probability design that achieved a high-income oversample by oversampling people older than 25 or who had a college education. Of the two National Study sub-samples, the SRC sample is most comparable to the Panel Study's nationally-representative sub-sample, which is also collected by the University of Michigan's Survey Research Center and is also referred to as the "SRC" sample. Our analysis uses the National Study's SRC subsample and the Panel Study's SRC subsample.[1,2,3]

[1]Although the National Study's SRC sample oversampled high-income people, the Census Bureau's high-income oversample was based directly on incomes reported to the IRS and consequently obtained a "better" high-income oversample than did the SRC. The Census sample was collected to achieve design goals of the National Study (e.g., construct a measure of aggregate giving in the U.S. and the share of that giving done by different income groups) but is not usable for comparison with subsequent surveys that do not also contained a similarly constructed high-income oversample. Among subsequent American surveys, only the Panel Study comes anywhere close to matching the Census sample's measurement of the top of the giving distribution: the Panel Study matches the National Study's measurement of giving (Census + SRC sample combined) through the 92nd percentile (Wilhelm, 2007). Setting aside the Census sample, the Panel Study matches the National Study's SRC sample higher into the distribution, to the 98th percentile (Wilhelm et al., 2007). We follow Wilhelm et al. (2007) and use the National Study's SRC sample, with the qualification that our findings apply to generational succession among "typical" American families. Generational succession among families in the top two percent of the giving distribution is a topic for future research.

[2]In addition to its SRC nationally-representative sample, the Panel Study also contains a low-income oversample (see next footnote) and a 1997 immigrant refresher sample. We do not use these two samples in order to maintain better comparability with the National Study's SRC sample.

[3]Historical note: James Morgan, Principal Investigator of the National Study, was also the founding Principal Investigator of the PSID in 1968. Morgan originated the idea to collect the nationally-representative SRC subsample as part of the PSID, in addition to the low-income oversample that the federal government's Office of Economic Opportunity approached him to collect (Duncan, 1999). Morgan led the PSID into the 1980s. In the late 1990s Morgan contributed his expert advice based on his

Previous work indicates that the Panel Study provides a reasonably representative measurement of important aggregates such as income, wealth and giving. For example Gouskova, Andreski, & Schoeni (2010) find that the Panel Study measures a slightly higher level of income than does the Current Population Survey, but that measurement of income trends matches CPS income trends closely, except at the very top and bottom of the income distribution. Likewise, Pfeffer, Schoeni, Kennickell, & Andreski (2015) find that the Panel Study measurement of total net worth is similar to that of the Survey of Consumer Finances, again except at the top two percent of the wealth distribution; see Juster, Smith, and Stafford (1999) for a similar result. Again likewise, Wilhelm (2006) finds that the Panel Study distribution of giving matches the distribution of IRS charitable deductions fairly closely, except at the very top of the distribution.

Because age is a central variable in the present paper Table B1 checks to make sure that the age distributions in the Panel Study and in the National Study match the age distributions from the Current Population Survey. Column 1 presents the distribution of adults ages 25-59 in 2012 from the CPS. Column 2 shows that that is matched by the age distribution from the 2012 wave of the Panel Study fairly well: a slightly smaller fraction of the Panel Study's adults are in the youngest category (25-29), a slightly larger fraction are in the oldest category (55-59), and virtually identical fractions are in the middle categories. Column 3 presents the 1972 age distribution from the CPS, and column 4 shows that the National Study's age distribution is virtually identical.

design of the PSID, the National Study of Philanthropy, and numerous other high-quality surveys to the team designing the Philanthropy Panel Study, the PSID's philanthropy module.

Table B1. Age distributions in the Panel and National Studies compared to the CPS.

Age range	CPS 2012	Panel Study 2012	CPS 1972	National Study 1973
25 - 29	.144	.126	.295	.304
30 - 34	.140	.140		
35 - 39	.131	.130	.245	.243
40 - 44	.143	.146		
45 - 49	.148	.147	.254	.249
50 - 54	.154	.152		
55 - 59	.141	.159	.206	.205
60 - 64	–	–		

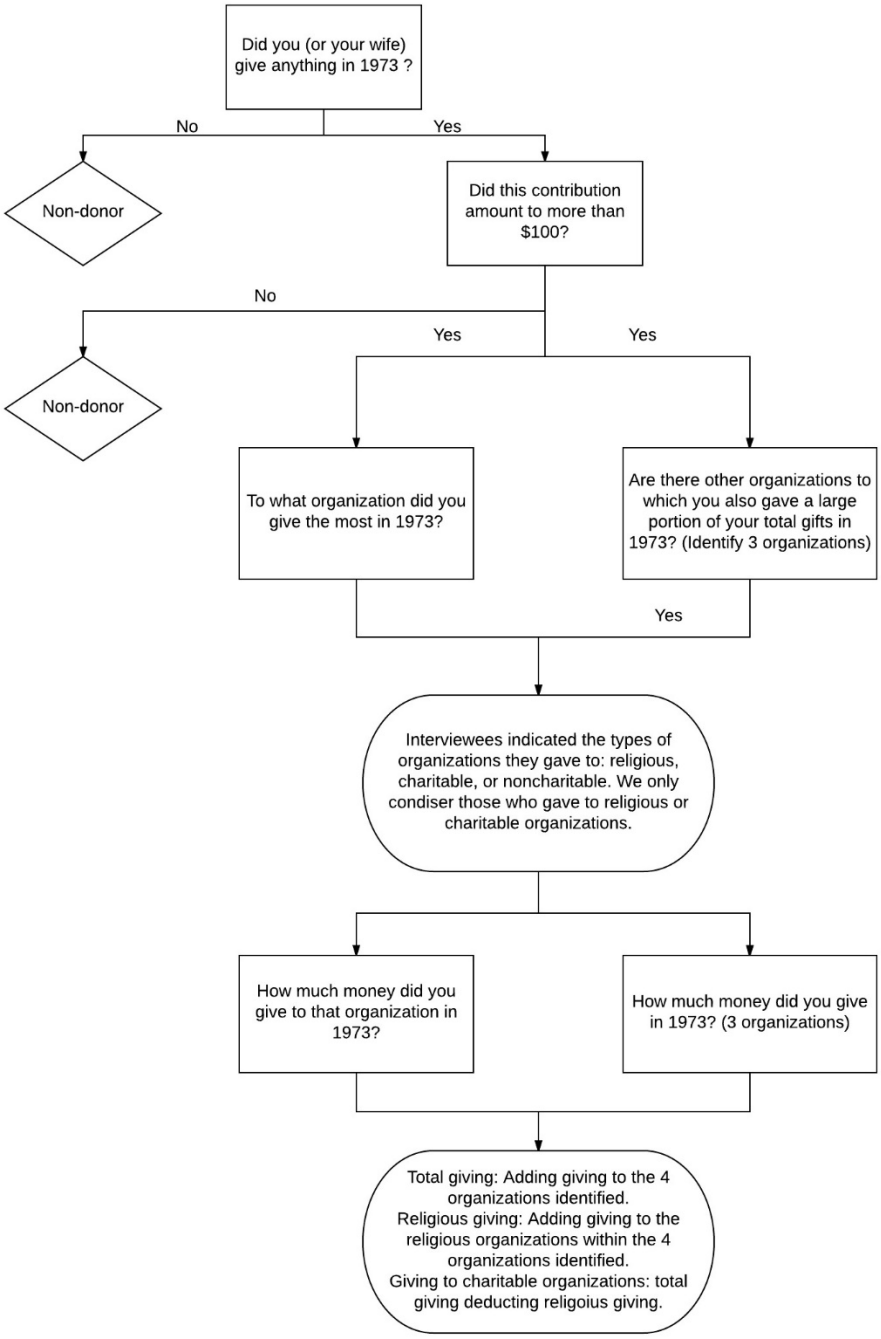
Notes. Column 1 is from the U.S. Census Bureau (2013). Column 3 is from the U.S. Census Bureau (1974). Columns 1 and 2 are conditional on the set of adults in the 25-59 age range; columns 3 and 4 are condition on the set of adults ages 25-64.

B.3 Measuring giving

As described in the text, the National Study interview had a skip pattern that has two implications for our analysis. Figure B1 below is a flow chart that describes the skip pattern. After the initial screening question ("Did you give . . .") respondents who donated were asked if they had given more than $100 in total to "religious or other charitable organizations". Only if they said "yes" were they asked about the total amount they gave, and the separate types of organizations to which they gave. Following Wilhelm et al. (2007) we use the amounts given to religious organizations reported in response to these questions to measure 1973 giving to "congregations". Giving to charitable organizations is then the total amount of all giving minus the amounts given to congregations just described.

As a minor note, although the survey question was framed in terms of having given more than $100, 35 people reported giving exactly $100 and were asked all of the subsequent detailed questions about giving. We include these 35 respondents in our analysis.

Figure B1. Flow chart of the National Study of Philanthropy's opening questions about giving.



The $100 screening question implies that for respondents who gave something to a charitable organization or congregation, but whose total amount given was less than $100, all that is known is that they gave something in the interval $1-to-$100 in 1973 dollars. Continuing with the example of 36-60 year-olds in 1973 from the text, this would be $6.16-to-$616 in inflation/real income growth adjusted 2012 dollars. For the National Study respondents in this interval we set their giving to the lower bound ($6.16 in 2012 terms), and artificially impose this same lack of information on the Panel Study respondents who gave in the interval $6.16-to-$616 by setting their giving to the lower bound. Again, this follows Wilhelm et al. (2007).

Finally, a reader pointed out that it may be the case that the high screen of $100 resulted in an underestimate of donors of large amounts in the National Study. To the extent that it did, the percentages of donors of large amounts in 1973 are too small, and the generation-to-generation drop in that percentage that we report also too small.

B.4 Methods

B.4.1 Adjustments to 2012 terms

The general idea of adjusting the National Study's amounts given from 1973 dollars to 2012 terms was explained in the text: adjust the 1973 amounts forward to account for both real income growth and inflation. We continue with the example from the text: the giving of 36-60 year olds in 1973, is adjusted to 2012 by a factor and inflation real growth factor of 6.16. The 6.16 describes inflation/real growth for people ages 35 to 64, the closest age grouping to 36-60 for which income growth rates can be calculated from national statistics (U.S. Bureau of the Census, 2015).

The inflation adjustment needs no explanation. As for the real income adjustment: if 36-60 year-olds gave $150 on average in 1973, and had there been no inflation between 1973 and 2012 (for the sake of argument) but the incomes of people aged 36-60 had increased by 50% over that time period and at the same time the average giving of 36-60 year-olds had also increased by 50% to $225, we would say that giving of 36-60 year olds had increased in line with expectations based on what 36-60 year-olds were giving in 1973. In this sense, those expectations, and our results, are about generational succession in giving as a percentage of income available to each generation, even though (as we say in the text) we present the results in dollar terms to ease discussion.

We carried out the inflation/real growth adjustment in two steps: (1) adjust 1973 amounts forward to a middle year among the 2000-2012 Panel Study years (e.g., 2006) using age-specific nominal income growth rates from national statistics (nominal income growth rates capture both real income growth and inflation) and then (2) inflation-adjust between the middle year and 2012 using the Consumer Price Index.

Table B2 describes the adjustments for the two age groups—25-47 year-olds and 36-60 year-olds—used in Panel 1 of both Tables 1 and 2. For example, row 2 shows that the giving of 36-60 year-olds in 1973 was first adjusted to 2006 by a factor of 5.40. The 5.40 is the weighted average growth rate of nominal household income for 35-44, 45-54 and 55-64 year-olds (U.S. Bureau of the Census, 2015). Then the amounts are inflation-adjusted from 2006 to 2012 by a factor of 1.14, the CPI inflation rate (U.S. Department of Labor, 2016). The total adjustment is 5.40 * 1.14 = 6.16. The corresponding 5.90 total adjustment for 25-47 year-olds in row 1 is based on the slightly lower 5.18 weighted average growth rate of nominal household income for 25-34 and 35-44 year-olds.

We adjust the Panel Study data similarly: (1) adjust 2000-2004 and 2008-2012 amounts to the middle year (e.g., 2006), but for the Panel Study we use its own income data and then (2) inflation-adjust between the middle year and 2012 using the CPI. We use the Panel Study's own income data because, as noted above, measurement of changes in income in the Panel Study of Income Dynamics (PSID) is comparable to that in the Census Bureau's Current Population Survey (Gouskova, Andreski, & Schoeni, 2010). Table B3 repeats the total adjustments (from Table B2) for the National Study in column 2, and then the total adjustments for each of the Panel Study years in columns 3-9. Because the middle year is 2006, the 2006 adjustment (1.14) is just the CPI inflation rate from 2006 to 2012.

In Appendix C below there are five separate generation–life-cycle groups: Millennial young adults (ages 25-31), GenX young adults (ages 25-31), GenX middle adults (ages 32-47), Baby Boom middle adults (ages 36-47), and Baby Boom senior adults (ages 48-60). The amounts given by each of these age groups are adjusted to 2012 terms in the manner just described. However, because the age ranges in the five separate group are different from the 25-47 and 36-60 ranges in Tables B2 and B3 different adjustments are needed. Table B4 presents the adjustments for the 1973 data, and Table B5 presents the adjustments for the Panel Study years. Starting with the Panel Study and Table B5, rows 4-7 indicate that Millennial young adults appear in the Panel Study in 2006-2012; for them the middle year for adjustment is 2010 (in column 3 the income adjustment is 1.00 because no adjustment is needed for the middle year; the inflation adjustment to 2012 is 1.05 in column 4 and therefore the total adjustment to 2012 is 1.05 in column 5). In line with this, the first row in Table B4 shows the adjustment of the 1973 amounts given by 25-31 year-olds from 1973 to 2010, the middle year for Millennial young adults. Table B4 Row 2 adjusts the 1973 amounts given by 25-31 year-olds from 1973 to 2006,

the middle year for GenX young adults. For the other groups—GenX middle adults, Baby Boom middle adults and Baby Boom senior adults—the middle year is 2006.

Panel 2 in the text (for both Tables 1 and 2) presents near-term generation-to-generation comparisons: Millennial young adults compared to GenX young adults and GenX middle adults compared to Baby Boom middle adults. To compare Millennial young adults to GenX young adults, the "middle year" (to which amounts given are adjusted by nominal income growth rates) must be the same for both groups, and the average income in each calendar year among 25-31 year-olds used to calculate nominal income growth rates should be the same for both the Millennials and GenX. Neither of these requirements are satisfied by the adjustments in Table B5; Table B5 used different middle years for the Millennial (2010) and GenX (2006), and used different average incomes (according to whether the young adults were Millennials or GenX) to form the nominal income growth rates. Therefore the Table B5 adjustments cannot be used for the near-term generation-to-generation comparisons in the Panel 2s.

For the Panel 2s we adjust amounts given by GenX middle adults to 2010, the same middle year used for Millennial young adults, and use nominal incomes for 25-31 years-olds in each calendar year to calculate the nominal income growth rates. For the Panel 2s' GenX comparison to Baby Boomers when both were in their middle adulthood years, we use nominal incomes for 36-47 years-olds in each calendar year to calculate the nominal income growth rates. Table B6 shows the adjustments used to produce the Panel 2s.

Table B2. Adjusting 1973 amounts given to 2012 terms in Panel 1 of both Tables 1 and 2.

Age group	*Income growth rate from 1973 to 2006* [ab]	*Inflation adjustment from 2006 to 2012* [c]	*Total*
25-47	5.18	1.14	5.90
36-60	5.40	1.14	6.16

Notes: The income growth rates in column 2 were based on the change in nominal household income within age-specific categories. Nominal household income for 1973 and 2006 is from U.S. Bureau of the Census (2015) which reports average incomes for the age ranges 25-34, 35-44, 45-54 and 55-64. For row 1 column 2 we form a weighted average for the 25-34 and 35-44 groups in both 1973 and 2006 and from these calculate the growth rate in nominal income. For row 2 we do the same using the 35-44, 45-54 and 55-64 groups. The CPI inflation rate in column 3 is from U.S. Department of Labor (2016). The total adjustment in column 4 is column 2 times column 3.

Table B3. Adjusting 2000-2004 and 2008-2012 amounts given to 2012 terms in Panel 1 of both Tables 1 and 2.

	1974 National Study	*Panel Study of Income Dynamics*						
Age group	*of Philanthropy*	*2000*	*2002*	*2004*	*2006*	*2008*	*2010*	*2012*
25-47	5.90	1.28	1.26	1.14	1.14	1.11	1.18	1.15
36-60	6.16	1.27	1.33	1.18	1.14	1.09	1.15	1.07

Notes: Columns 3-9 are the total adjustments for the Panel Study data from the indicated year to 2012. Average income for age-specific groups is calculated from the PSID. The CPI inflation rate is from U.S. Department of Labor (2016).

Table B4. Adjusting 1973 amounts given to 2012 terms in Appendix C's Figures 1, 3, 4 and 6.

Age group	*Income growth rate from 1973 to 2006/2010* [ab]	*Inflation adjustment from 2006/2010 to 2012*	*Total*
25-31[a]	4.89	1.05	5.13
25-31[b]	4.96	1.14	5.66
32-47[c]	5.17	1.14	5.89
48-60[d]	5.53	1.14	6.30

Notes: See the notes to Table B2. Average household income used to calculate the growth rate in nominal income in column 2 is for 25-34 year olds in rows 1 and 2, 35-44 year-olds in row 3 and 45-64 year olds in row 4. In column 3, the CPI-based inflation rate from 2010 to 2012 is 1.05, and from 2006 to 2012 is 1.14.

[a] The middle year is 2010 for the adjustment used to form comparisons with Millennial young adults.

[b] The middle year is 2006 for the adjustment used to form comparisons with GenX young adults.

[c] The middle year is 2006 for the adjustments used to form comparisons with GenX middle adults and Baby Boom middle adults.

[d] The middle year is 2006 for the adjustment used to form comparisons with Baby Boom senior adults.

Table B5. Adjusting Panel Study amounts given to 2012 terms in Appendix C's Figures 1, 3, 4 and 6.

Generation–life-cycle	*Calendar Year*	*Income growth rate from calendar year to 2006/2010*	*Inflation adjustment from 2006/2010 to 2012*	*Total*
Millennial young adults (ages 25-31)	2000	—	—	—
	2002	—	—	—
	2004	—	—	—
	2006	1.09	1.05	1.15
	2008	1.02	1.05	1.07
	2010	1.00	1.05	1.05
	2012	0.91	1.05	0.96
GenX young adults (ages 25-31)	2000	1.13	1.14	1.29
	2002	1.10	1.14	1.26
	2004	1.10	1.14	1.25
	2006	1.00	1.14	1.14
	2008	0.91	1.14	1.04
	2010	0.90	1.14	1.02
	2012	—	—	—
GenX middle adults (ages 32-47)	2000	1.21	1.14	1.38
	2002	1.15	1.14	1.32
	2004	1.07	1.14	1.22
	2006	1.00	1.14	1.14
	2008	0.91	1.14	1.04
	2010	0.96	1.14	1.09
	2012	0.92	1.14	1.04
Baby Boom middle adults (ages 36-47)	2000	1.20	1.14	1.37
	2002	1.18	1.14	1.34
	2004	0.98	1.14	1.12
	2006	1.00	1.14	1.14
	2008	0.98	1.14	1.11
	2010	1.02	1.14	1.16
	2012	—	—	—
Baby boom senior adults (ages 48-60)	2000	1.03	1.14	1.17
	2002	1.15	1.14	1.31
	2004	1.06	1.14	1.21
	2006	1.00	1.14	1.14
	2008	0.96	1.14	1.09
	2010	1.02	1.14	1.16
	2012	0.94	1.14	1.07

Note: See the notes to Table B3.

Table B6. Adjusting Panel Study amounts given to 2012 terms in Panel 2 of both Tables 1 and 2.

Age group	*Calendar Year*	*Income growth rate from calendar year to 2006/2010*	*Inflation adjustment from 2006/2010 to 2012*	*Total*
25-31[a]	2000	1.01	1.05	1.07
	2002	0.99	1.05	1.04
	2004	0.98	1.05	1.03
	2006	0.94	1.05	0.99
	2008	0.94	1.05	0.99
	2010	1.00	1.05	1.05
	2012	0.98	1.05	1.03
36-47[b]	2000	1.15	1.14	1.31
	2002	1.14	1.14	1.30
	2004	1.00	1.14	1.13
	2006	1.00	1.14	1.14
	2008	0.96	1.14	1.09
	2010	1.00[c]	1.14	1.14
	2012	0.95	1.14	1.09

Notes: [a] The middle year is 2010 for the adjustment used to form comparisons with Millennial and GenX young adults.
[b] The middle year is 2006 for the adjustment used to form comparisons with GenX and Boomer middle adults.
[c] It is a coincidence that the adjustment for this year is 1.00; the middle year for 36-47 year-olds is 2006.

B.4.2 Extensions relative to Wilhelm et al. (2007)

For the first two extensions in the paper relative to Wilhelm et al. (2007)—(1) results about the percentages in each generation who give large amounts and the average amount given by these "large amount donors" and (2) near-term generation-to generation comparisons—there is a subtlety. For the first extension, a person who (a) gave more than $100 to charitable organizations and religious congregations combined and (b) gave something to charitable organizations, did not necessarily give more than $100 to just the charitable organizations. For example, among the group of Greatest/Silent generation ages 36-60 in 1973, 51% did (a) and

(b)—see Table 1 Panel 1, row 2 column 4—but among that 51%, 42% gave (more than zero but) $100 or less to charitable organizations. Although the language is somewhat strained, we are careful in the text to say "the percentage who gave to charitable organizations (and who gave large amounts to charitable organizations and religious congregations combined)" with the maintained understanding that the charitable organizations were not always the recipients of the large amounts ($100 or more). Likewise, we say "the percentage who gave large amounts (and who gave large amounts)" with the maintained understanding that congregations were not always the recipients of the large amounts.

The second extension—near-term generation-to generation comparison—requires data from the Panel Study only. Nevertheless, a similar subtlety arises: in the Panel Study's questionnaire, amounts given (and the split between amounts given to charitable organizations and congregations) were asked only of respondents who gave more than $25 (in terms of dollars in the 2000s) to charitable organizations and religious congregations combined. Because the $25 threshold is a fairly small amount, for the near-term generation-to generation comparisons we ease the language in the text, making statements like "the percentage of Millennial young adults who give to charitable organizations is 12 points lower than the percentage of GenX young adults who did so". This really means: the percentage who (a) gave more than $25 to charitable organizations and religious congregations combined and (b) gave something to charitable organizations is 12 points lower. We think the $25 threshold is small enough that it need not be kept in mind when interpreting the results in the same way that the higher $100 National Study threshold should be kept in mind.

B.4.3 Influential observations

The possibility that a very small number of influential observations can dramatically alter an estimate of average giving is more of a problem for us than it was for Wilhelm et al. (2007), and therefore we take a different approach. Wilhelm et al. (2007) used only middle adulthood respondents from the National Study, ages 35-49; $N = 574$. They decided that none of these observations were influential. We are using three stages of adulthood across ages 25-60; $N = 1{,}469$. By using two and a half times more observations from a study that has a high income oversample there are simply more possibilities for us to encounter influential observations, and we did.

We define a National Study giving amount to be potentially influential if it noticeably stands apart from the rest of the distribution of giving. Visual inspection of the data reveals only six observations, each giving more than $50,000 (in 2012 terms), that clearly stand apart. Applying this definition to the Panel Study yields 25 observations with amounts given larger than $50,000, but including them or excluding them makes negligible difference to the estimated Panel Study averages.

In the text's Panel 1 (for both Tables 1 and 2) we did not include the National Study's influential observation in estimating 1973 averages, but did include the Panel Study's influential observations in estimating averages from the 2000s (see the notes to Tables 1 and 2). This has the effect of making the 1973 estimated averages somewhat smaller and the 2000s estimated averages somewhat larger, yielding more conservative results about lower-than-expected average giving among the Millennial, GenX and Baby Boom generations.

In Appendix C, which contains the results for five separate generation–life-cycle groups, we present two 1973 estimates for each comparison: one that includes the National Study's influential observations and one that does not. The Panel Study estimated averages in Appendix C include the influential observations, just as in the main text's Panel 1s. The six influential observations in the National Study are: (a) Silent/Boom young adults: one for giving to congregations; (b) Silent middle adults: one for giving to charitable organizations; (c) Greatest senior adults: three for giving to congregations and one for giving to charitable organizations.

B.4.4 Clustering and weights in the Panel Study

The third extension relative to Wilhelm et al. (2007) is pooling seven waves from the PSID together to generate more precise estimates. Because the same persons can, and do, appear multiple times in the pooled cross-section Panel Study data we adjust the standard errors for clustering. The clustering is done at two levels: individual and couple (see Cameron & Miller, 2013). The need for two-level clustering arises from the family-based unit of analysis in the Panel Study and family composition change over time. In a single wave (e.g., 2000) of the Panel Study, the unit of analysis for charitable giving is the "family unit". For single people, the family unit is headed by a man or a woman (obviously). For couples (legally married or cohabiting) the family unit is headed by a man and a woman.

For couples, married and cohabiting, the unit of analysis at which giving is measured in the Panel Study is that of the couple, just as the unit of analysis at which income, wealth and consumption expenditure are measured in each wave is also the couple.[4] However, when using

[4] The family unit of analysis for giving in the PSID is no different than it is for income, wealth, and consumption expenditure. Strictly speaking the family unit also includes other people living in the household who share economic resources with the head, such as children, but it is standard practice to think of the family-level income, wealth,

data from multiple waves, the couple can no longer serve as the unit of analysis because not all couples remain together over time: some break up and others newly form. The only unit of analysis that is stable over time is the individual. To handle the complication that giving is measured at the unit of the couple but that individuals, not couples, are the stable units of analysis over time, for each observation of a couple we create two individual-level observations, one for the man and another for the woman. For each of these two observations, we assign a weight equal to one-half the "couple-level" weight that couple had in the PSID; this ensures that averaged calculated with the weighted individual-level observations are identical to the weighted averages with the couple-level observations.[5]

consumption expenditure and giving as reflecting the behavior and decisions of primarily the person or couple at the head.

[5] An additional advantage of this approach is that if the man and the woman in a couple belong to different generations or life-cycle stages, we can assign the man to his appropriate generation/life-cycle stage and the woman to her's, and avoid having to assign the couple as a unit to either the man's generation/life-cycle stage or the woman's generation/life-cycle stage.

Appendix C. Results for five generation–life-cycle groups.

In the text's Panel 1 for both Tables 1 and 2 we presented results for two recent generational groups: (1) Millennial young adults, GenX young adults and GenX middle adults, and (2) Baby Boom middle and senior adults. In this appendix we present results for the five separate generation–life-cycle groups described in Appendix A: Millennial young adults (ages 25-31), GenX young adults (ages 25-31), GenX middle adults (ages 32-47), Baby Boom middle adults (ages 36-47), and Baby Boom senior adults (ages 48-60). The age ranges in parentheses are the age ranges used with the National Study to form the 1973 comparison groups. As for middle adults, note that when comparing GenX middle adults to 1973 middle adults we use 32-47 year-olds in 1973, but when we compare Baby Boom middle adults to 1973 middle adults we use the slightly narrower age range of 36-47 year-olds in 1973—the slightly narrower age range matches the availability of Baby Boom middle adults in calendar years 2000-2010 (see Appendix A).

The age ranges for the five separate groups are obviously narrower than the two age ranges used in the Panel 1s, and accordingly this implies smaller sample sizes. The smaller sample sizes are most notable in the National Study (*N*s = 388, 618 and 463) for the three age ranges in 1973, leading to larger standard errors on the 1973 estimated averages. Therefore, for the results describing the five generation–life-cycle groups in this appendix we follow Wilhelm et al. (2007) and base our interpretation of these results not on the statistical significance of any one generation-to-generation difference, but rather on the overall pattern of the differences. Recall our main purpose here is a sensitivity check to see if any of the results based on the five groups suggest a qualification to the Panel 1 results for (1) Millennial/GenX–young/middle adults and (2) Baby Boom–middle/senior adults. And recall that the one instance where a

qualification is suggested is in the giving to congregations by Millennial young adults and GenX young adults.

We also describe the effects of the National Study's influential observations on the estimates. Recall that to achieve a more conservative interpretation of generation-to-generation change, the National Study estimates in the Panel 1s do not include influential observations, but the Panel Study estimates do.

C.1 Charitable organizations

Figures 1-3 present generation-to-generation comparisons about giving to charitable organizations. Figure 1 presents estimates of average amounts given, averaging across both donors and non-donors. The left most bar indicates that the estimate of average giving among Millennial young adults is $157 (the height of the bar), one-half of the amount that would have been expected based on the $315 estimated average giving of Silent/Boom young adults in 1973 (the asterisk above the bar). The 95% confidence interval around the $157 is displayed in the figure. The next bar to the right indicates that at $298, average giving among GenX young adults is not much less (about $50) less than the $347 that would have been expected based on the Silent/Boom young adults; the $347 is right on the edge of the Panel Study 95% confidence interval. Moving to the middle bar there is stronger evidence that GenX middle adults are giving a lower amount, on average, than did Silent generation middle adults: $551 compared to $770. The $770 estimate does not include one National Study influential observation, but including this observation raises the Silent generation estimated average only slightly (the "+" marker in Figure 1). Table Panel 1, row 1 column 2 in the text combined into one group the sample described in

these left most three bars from Figure 1—Millennial young adults with GenX young and middle adults—and estimated their average giving to be $443.

The next bar (fourth from the left) indicates that Baby Boom middle adults are giving in line with expectations based on the average giving of the Silent generation: $751 compared to $758. The last bar indicates that Baby Boom senior adults are giving $974, on average, to charitable organizations. This is not much less ($104) than the $1,078 estimate of average giving of Greatest generation senior adults in 1973 if one influential observation is excluded. If the observation is included the Greatest generation average is just a little higher. Table 2 row 1 column 5 combined Baby Boom middle and senior adults into one group and estimated their average giving to be $880.

Our overall read of Figure 1 is the same as Table Panel 1, row 1: there is evidence that Millennial young adults and GenX young middle adults are giving, on average, amounts lower than would have been expected, but not so among the Baby Boom.

Figure 2 indicates that the "donors down" pattern seen in Table 1 Panel 1, row 2, that described lower percentages who give something to charitable organizations (and who give large amounts), applies to each of the five generation–life-cycle stage groups. The largest percentage point difference is 20 points between GenX middle adults (32%) and Silent generation middle adults (52%). The smallest percentage point difference is five points between Baby Boom senior adults (46%) and Greatest generation senior adults (51%). All of the differences in Figure 2 are statistically significant ($p < .05$).

Figure 3 presents estimates of average amounts given to charitable organizations, however averaging only across the donors represented by the percentages in Figure 2. In each comparison the estimates indicate that donors from the 2000s are either (a) giving amounts not

much lower, on average, than their 1973 comparison generation (Millennial young adults and Baby Boom senior adults), or giving higher amounts on average than would have been expected (GenX young and middle adults and Baby Boom middle adults).

In summary the evidence from Figures 1-3 matches that in Table 1 Panel 1. The average amounts given to charitable organizations are lower among Millennial young adults and GenX young and middle adults than would have been expected based on previous generations. In contrast, average amounts given by the Baby Boom appear to be in line with expectations. This mixed picture emerges from two unambiguous patterns: the percentages who give to charitable organizations (and who give large amounts) are down (Figure 2), but the average amounts given by such donors are in line with expectations or perhaps higher than expectations. Again, our interpretation: the number (percentage) of donors down, dollars per donor up.

Note that Figures 1-3 contain estimates close to, but not exactly equal to, those used in Table 1 Panel 2's "near-term" generation-to generation comparisons of giving to charitable organizations. For example, the two left-most bars in Figure 1 indicate the estimates of average giving (a) among Millennial young adults ($157) and (b) among GenX in young adults ($298) and these are nearly identical, but not exactly equal, to the $159 and $250 presented in Table 3 row 1 columns 2 and 1 respectively. The small difference between the estimates is because, as explained at the end of Appendix B, different nominal income growth rates were necessary to adjust amounts given to 2012 terms according to the two different comparisons: generations in the 2000s compared to generations in 1973 (Panel 1 in both Tables 1 and 2, and in Figures 1-6) and generations in the 2000s compared to each other (Panel 2 in both Tables 1 and 2).

C.2 Congregations

Figure 4 presents results about average giving to congregations. Starting with the Baby Boom middle and senior adults (the right-most two bars), average giving to congregations at $1,095 and $1,398 is less than expected compared to the Silent and Greatest generations in 1973. This result holds whether or not influential observations are included in the 1973 estimates, and echoes Table 2 Panel 1, row 1 columns 4-6.

Giving to congregations by Millennial young adults and GenX young and middle adults (the three left-most bars) is certainly less than expected compared to Silent/Boom young adults in 1973 if the influential observations are included in the 1973 estimates. If the one influential observation among the 1973 Silent generation young adults is not included, the 1973 estimate for 25-31 year olds to be compared to Millennial young adults falls to $493 (and is right on the edge of the Millennial young adults' 95% confidence interval) and the estimate to be compared to GenX young adults falls to $544 (and is in the middle of the GenX young adult confidence interval). Hence, the qualifying nuance discussed in the text: the Millennial/GenX – young/middle adults less than expected giving to congregations (by −$412; Table 2 row 4 column 3) is that it may apply with less force to Millennial young adults (although even setting the 1973 influential observation aside, the 1973 estimate of $493 is still on the edge of the Millennial confidence interval) and to GenX young adults.

Despite this qualification, Figure 4's average giving to congregations emerges from the two unambiguous patterns seen before: the percentages who give large amounts and who give to congregations are down (Figure 5) in each of the five comparisons, but the average amounts given by those who give to congregations (and who give large amounts) for the most part is in line with expectations or perhaps higher than expectations (Figure 6). We say for the "most part"

because giving to congregations by GenX young adult donors (and Baby Boom senior adults) appears higher than (or for the Baby Boom senior adults, in line with) expectations only if one (three) influential observations are excluded from the 1973 averages.

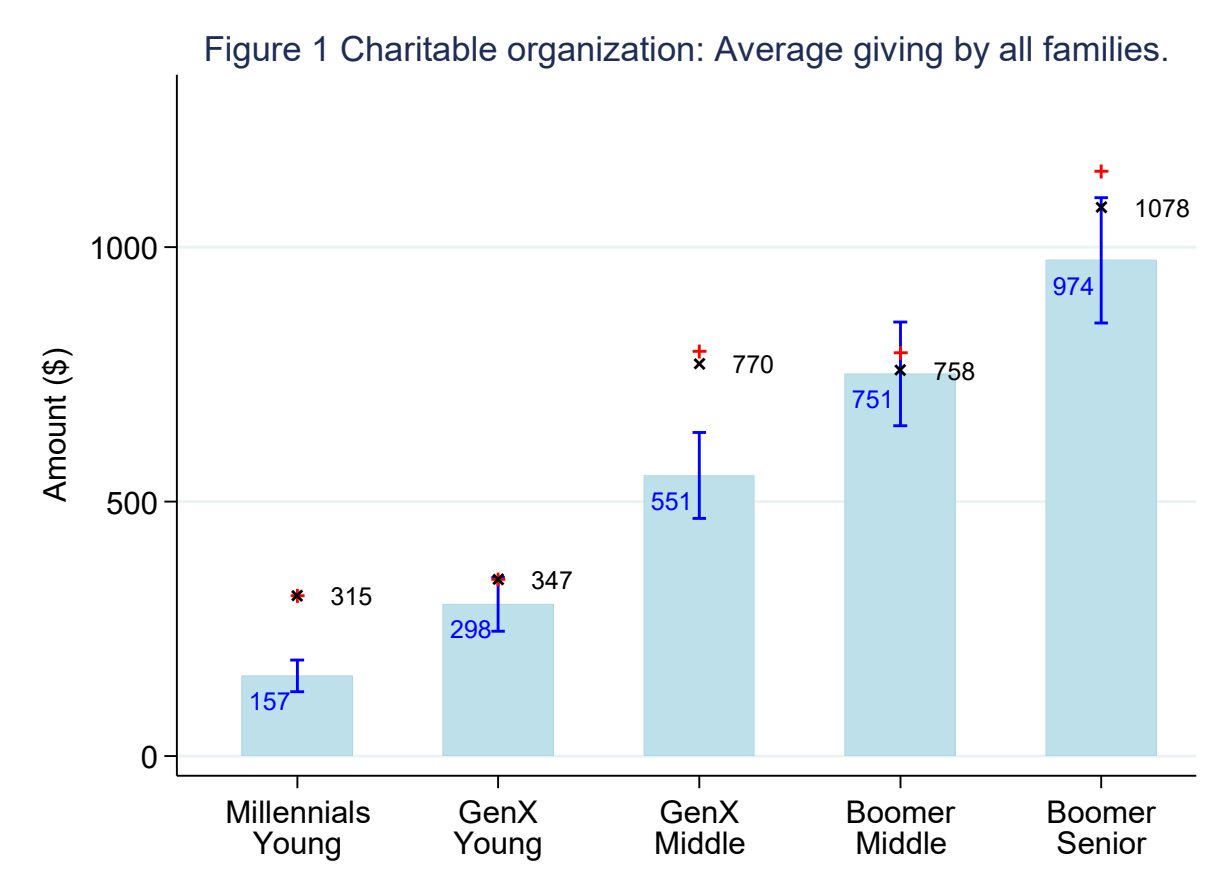


Figure 2 Charitable organization: Incidence of giving.

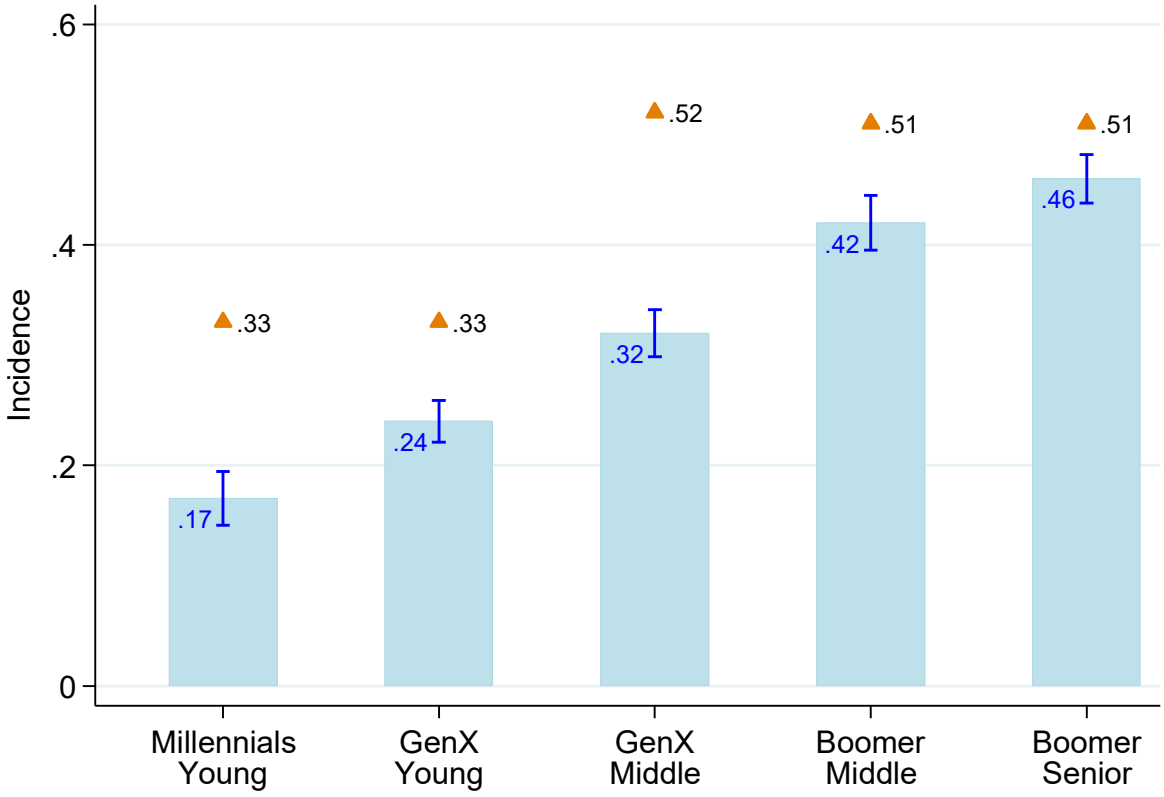


Figure 3 Charitable organization: Average giving by donors.

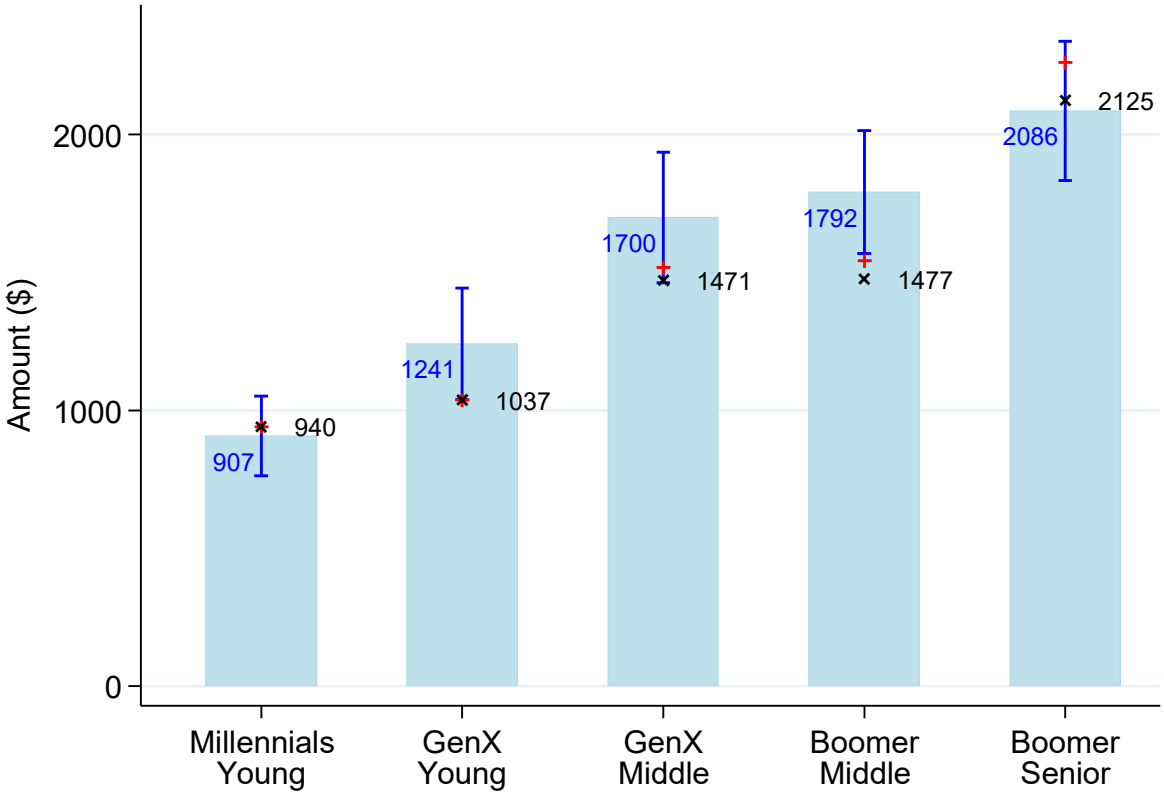


Figure 4 Congregation: Average giving by all families.

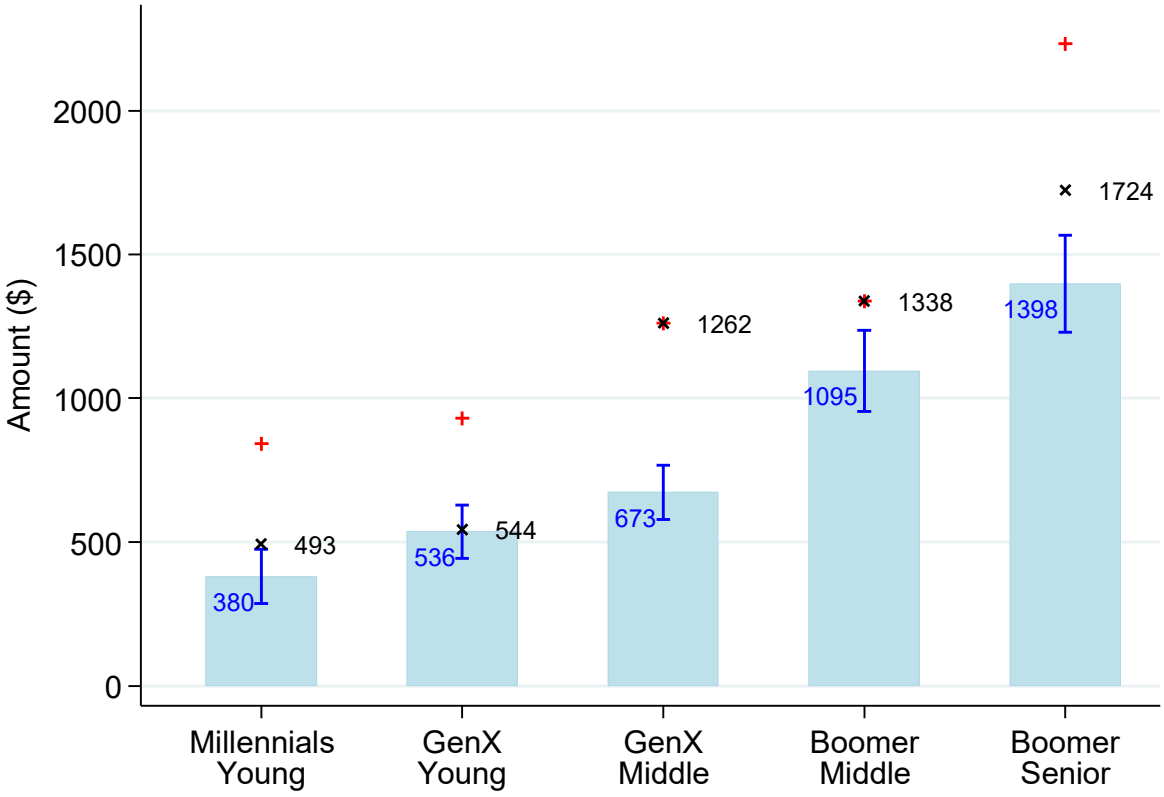


Figure 5 Congregation: Incidence of giving.

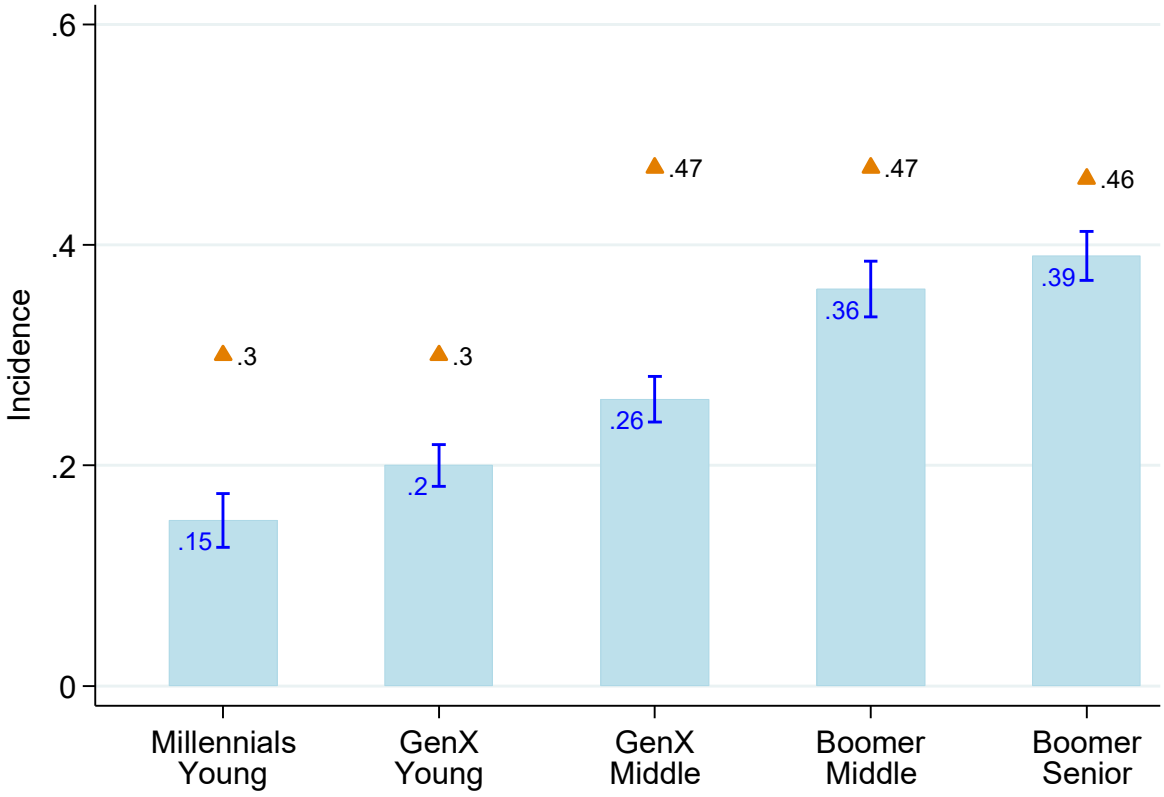
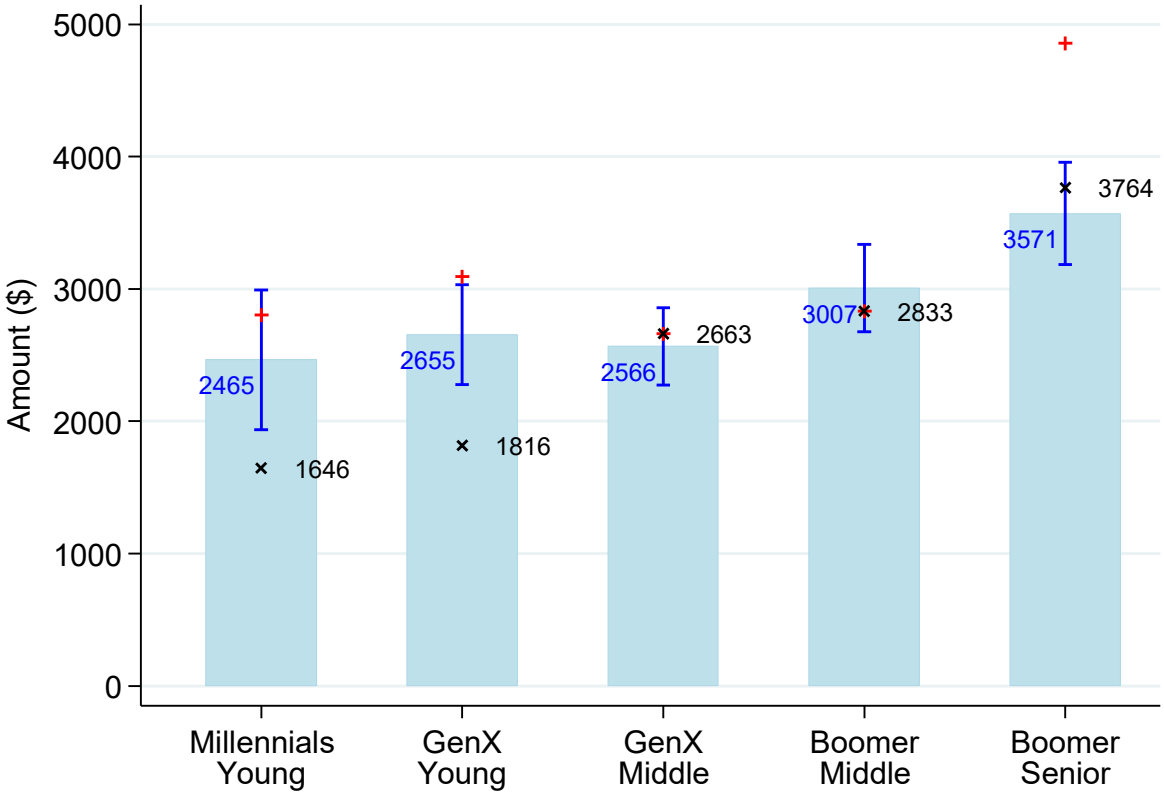


Figure 6 Congregation: Average giving by donors.



C.3 Sensitivity checks

C.3.1 Influential observations

We have examined the robustness of the results to the inclusion or exclusion of influential observations from the National Study samples, and in Sections C.1 and C.2 have already noted any sensitivity of the results when it occurred. Recall that potentially influential observations in the Panel Study are always included; this reduces differences between the National Study averages and the Panel Study averages when the former are higher than the latter, and leads to more conservative conclusions in Table 1 and 2's Panel 1 row 1. We checked the results about donors of large amounts in Table 1 and 2's Panel 1 row 3 and in Figures 3 and 6, where in several comparisons Panel Study averages were higher than National Study averages, by excluding the Panel Study influential observations: this did not qualitatively change the comparisons.

C.3.2 The Great Recession and the recovery years

We also checked the robustness of the results to dropping the years of the Great Recession and the post-recession recovery for the two comparisons involving GenX middle adults and Baby Boom senior adults, two groups for which a non-negligible fraction of their observations came from the years of the Great Recession and recovery (62 and 48 percent, respectively). Table C1 reports estimates of average giving for GenX middle adults and Baby Boom senior adults using just the pre-Recession years 2000-2006. The table indicates that dropping the years of the Great Recession and the recovery to focus on the pre-Recession years makes little difference in the estimates. The estimate of average giving to charitable organizations by GenX middle adults drops to $522 when only the pre-recession years are used;

this estimate is a little lower (somewhat surprisingly) than the $551 in Figure 1 because by focusing on the pre-recession years, we are necessarily focusing on the youngest of the GenX middle adults (all GenX people aged 42-47 are necessarily dropped). In addition, the average giving in the recession years is driven by large donors. If we exclude from the average three observations who gave above $25,000, the average giving in recession years ($518) is nearly identical to the pre-recession years ($522). The estimate of average giving to congregations by GenX middle adults also is a little lower when only the pre-recession years are used: $644 compared to $673. Overall, the changes in estimates seen by dropping the recession years are small and do not qualitatively alter the comparison of GenX middle adults to Silent generation middle adults.

Similarly, the comparison of Baby Boom senior adults to Greatest generation senior adults is not altered by dropping the recession years. The estimates of Baby Boom senior adult average giving to charitable organizations and congregations do increase (by $30 from $974 to $1,004 for charitable organizations and by $61 from $1,398 to $1,459 for congregations), but the increases are small.

Among Millennial young adults it is also the case that a non-negligible fraction of the observations (94 percent) came from the years of the Great Recession and the recovery. Unfortunately, there are not enough pre-recession observations for Millennial young adults to form a meaningful estimate that excludes the Great Recession/recovery years: 2006 is the only such year and in 2006 the oldest Millennials were 25-years old ($N = 207$). Hence the limitation to interpreting the results about Millennial young adults pointed out in the text's Discussion section.

For GenX young adults and Baby Boom middle adults the fractions of observations from the years of the Great Recession and the recovery are low to begin with: 21 and 13 percent.

Table C1. Average giving by all families: Pre-recession years 2000-2006.

Notes: The estimates in the "all years" columns are from Figures 1 (charitable organizations) and 4 (congregations).

	GenX *Middle adulthood*		*Baby Boom* *Senior adulthood*	
	All years	*Pre-recession*	*All years*	*Pre-recession*
Charitable organizations	551	522	974	1004
	(43)	(28)	(63)	(56)
Congregations	673	644	1398	1459
	(48)	(38)	(86)	(75)

The sample sizes are $N = 4{,}620$ (GenX) and $N = 6{,}741$ (Baby Boom). Standard errors are in parentheses.

C.3.3 Alternative measurement of giving to congregations

We checked the robustness of the results to the measurement of giving to congregations in the National Study, which recall was based on whether a congregation was among the four organizations to which a respondent gave their four largest gifts. This measurement may slightly understate giving to congregations. To the extent that it does, then our measure of giving to charitable organizations in 1973, measured as all giving minus giving to congregations, will be slightly overstated. Therefore we checked the robustness of the results to using an alternative measurement of giving to congregations based on a question that immediately followed the question about total giving to all organizations: "About how much of that total, or what percent, went to a church or religious organization?" The alternative measurement suggests only a slightly higher amount going to congregations, and accordingly leads to essentially no change in our results.

C.4 Blinder-Oaxaca decomposition

Table B2 presents results decomposing the generation-to-generation change in average giving from Figures 1 and 4 into a part due to generation-to-generation change in income and wealth and a part due to generation-to-generation change in how much is given at each level of income and wealth—a Blinder-Oaxaca decomposition (Jann, 2008). We carried out the decompositions for generation-to-generation comparisons that did not include the influential observations in the 1973 averages.

For GenX (young and middle adults) and the Baby Boom (middle and senior adults) the results indicate that increases in income and wealth, compared to the income and wealth held by their Silent and Greatest generation comparison groups at the same life-cycle stages, offset what otherwise would have been even lower levels of giving. For example, the negligible $7 less-than-expected giving to charitable organizations by Baby Boom middle adults (Figure 1: $751 − $758 = − $7) would have been − $221 (less-than-expected) had it not been for +$214 higher giving attributable to increases in Baby Boom middle adults' income and wealth (compared to the income and wealth of the Silent generation when they were in middle adulthood). Hence, inferring "no change" in generation-to-generation giving from the negligible − $7 is not exactly correct: there have been two large changes, but in offsetting directions.

Similar results obtain for GenX, except that increases in income in wealth offset a smaller amount of the less-than-expected giving that otherwise would have appeared. For example, for GenX middle adults the $219 less-than-expected giving (Figure 1: $551 − $770 = − $219), would have been − $269 had it not been for +$50 higher giving attributable to increases in income and wealth (note: smaller than the Baby Boom's +$214).

The one exception to this pattern is among Millennial young adults. For them the $158 less-than-expected giving (Figure 1: $157 − $315 = − $158) is decomposed into − $147 that would have been had there been no change in income and wealth and −$11 attributable to lower income and wealth (again, compared to the Silent generation in their young adulthood years). The −$11 is a negligible amount, but it does indicate that for Millennial young adults, income and wealth are not offsetting less-than-expected giving. This may be an indication that, as suggested above, that the results for the Millennials may have been inordinately influenced by their giving being measured primarily during the Great Recession and recovery years.

Results for giving to congregations are similar, except that in most cases the higher giving due to income and wealth (e.g., +$143 and +12 for Baby Boom and GenX middle adults, respectively), though similar in size to the higher giving to charitable organizations due to income and wealth (e.g., +$214 and +50, respectively, as just discussed), does less offsetting of the much lower giving that otherwise would have appeared. Exceptions are GenX young adults (for whom the offsetting is nearly complete, leading to the negligible $8 less-than-expected giving seen in Figure 4) and Millennial young adults who experienced decreases in income and wealth that explain a portion of their less-than-expected giving (−$69 out of −$114).

Table C2. Blinder-Oaxaca Decompositions.

		Millennials vs. Silent/Boom Young adulthood	*GenX vs. Silent/Boom Young adulthood*	*GenX vs. Silent Middle adulthood*	*Boom vs. Silent Middle adulthood*	*Boom vs. Greatest Senior adulthood*
Charitable organizations	Giving by younger generation	157	298	551	751	974
	Giving by older generation	315	347	770	758	1078
	Total difference in giving between older and younger generations	–158	–49	–219	–7	–104
	Difference due to coefficient change	– 147	– 134	– 269	– 221	– 500
	Difference due to income and wealth change	– 11	84	50	214	396
Congregations	Giving by older generation	380	536	673	1095	1398
	Giving by younger generation	493	544	1262	1338	1724
	Total difference in giving between older and younger generations	–114	–8	–589	–243	–326
	Difference due to coefficient change	– 45	– 42	– 602	– 386	– 702
	Difference due to income and wealth change	– 69	34	12	143	376

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